? logon

```
*** It is now 2010/06/09 14:54:53 ***
(Dialog time 2010/06/09 13:54:53)
```

? b 155 biosci medicine 399

```
09jun10 12:55:07 User276629 Session D310.1
            $0.00
                    0.245 DialUnits File415
     $0.00 Estimated cost File415
     $0.08 INTERNET
     $0.08 Estimated cost this search
     $0.08 Estimated total session cost 0.245 DialUnits
SYSTEM:OS - DIALOG OneSearch
 File 155:MEDLINE(R) 1950-2010/Jun 07
         (c) format only 2010 Dialog
*File 155: Medline has been reloaded. Please see HELP NEWS154
for information.
 File
         5:Biosis Previews(R) 1926-2010/Jun W1
         (c) 2010 The Thomson Corporation
       24:CSA Life Sciences Abstracts 1966-2010/May
 File
         (c) 2010 CSA.
 File
       28:Oceanic Abstracts 1966-2010/May
         (c) 2010 CSA.
 File
       34:SciSearch(R) Cited Ref Sci 1990-2010/May W5
         (c) 2010 The Thomson Corp
 File
       35:Dissertation Abs Online 1861-2010/Apr
         (c) 2010 ProQuest Info&Learning
       40:Enviroline(R) 1975-2008/May
 File
         (c) 2008 Congressional Information Service
*File 40: This file is closed and will no longer update. For
similar data, please search File 76-Environmental Sciences.
 File 41:Pollution Abstracts 1966-2010/May
         (c) 2010 CSA.
 File
       44: Aquatic Science & Fisheries Abstracts 1966-2010/May
         (c) 2010 CSA.
       45:EMCare 2010/May W5
 File
         (c) 2010 Elsevier B.V.
 File 50:CAB Abstracts 1972-2010/Jun W2
        (c) 2010 CAB International
 File 65:Inside Conferences 1993-2010/Jun 09
        (c) 2010 BLDSC all rts. reserv.
 File 71:ELSEVIER BIOBASE 1994-2010/Jun W1
        (c) 2010 Elsevier B.V.
      72:EMBASE 1993-2010/Jun 09
         (c) 2010 Elsevier B.V.
*File 72: The archive of Medline derived records was added to Embase.
 File 73:EMBASE 1974-2010/Jun 09
         (c) 2010 Elsevier B.V.
*File
      73: The archive of Medline derived records was added to Embase.
 File
      76:Environmental Sciences 1966-2010/May
         (c) 2010 CSA.
 File 91:MANTIS(TM) 1880-2010/Mar
        2001 (c) Action Potential
```

```
*File 91: This file will be removed as of mid-July 2010.
 File 98:General Sci Abs 1984-2010/May
         (c) 2010 The HW Wilson Co.
  File 110:WasteInfo 1974-2002/Jul
         (c) 2002 AEA Techn Env.
*File 110: This file is closed (no updates)
  File 135: NewsRx Weekly Reports 1995-2010/May W5
         (c) 2010 NewsRx
*File 135: Vertical News titles on business, science, technology,
Leisure.
government and education have been added to the file
  File 136:BioEngineering Abstracts 1966-2007/Jan
         (c) 2007 CSA.
*File 136: This file is closed.
  File 143:Biol. & Agric. Index 1983-2010/Apr
         (c) 2010 The HW Wilson Co
*File 143: This file will be removed as of mid-July 2010.
  File 144:Pascal 1973-2010/May W5
         (c) 2010 INIST/CNRS
  File 154:MEDLINE(R) 1990-2010/Jun 07
         (c) format only 2010 Dialog
*File 154: Medline has been reloaded. Please see HELP NEWS154
for information.
 File 164:Allied & Complementary Medicine 1984-2010/Jun
         (c) 2010 BLHCIS
 File 172:EMBASE Alert 2010/Jun 09
         (c) 2010 Elsevier B.V.
  File 185:Zoological Record Online(R) 1864-2010/Jun
         (c) 2010 The Thomson Corp.
  File 357:Derwent Biotech Res. _1982-2010/May W3
         (c) 2010 Thomson Reuters
 File 369:NEW SCIENTIST 1994-2010/JAN W5
         (c) 2010 REED BUSINESS INFORMATION LTD.
 File 370:Science 1996-1999/Jul W3
         (c) 1999 AAAS
*File 370: This file is closed (no updates). Use File 47 for more
current
information.
 File 391:Beilstein Database - Reactions 2008/02
         (c) 2008 Beilstein GmbH
  File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 2006 The Thomson Corp
  File 457: The Lancet 1992-2010/May W5
         (c) 2010 Elsevier Limited. All rights res
*File 457: The supplier did not send an update the week of
February 21.
  File 467:ExtraMED(tm) 2000/Dec
         (c) 2001 Informania Ltd.
  File 138: Physical Education Index 1990-2010/May
         (c) 2010 CSA.
  File 149:TGG Health&Wellness DB(SM) 1976-2010/Apr W3
         (c) 2010 Gale/Cengage
  File 156:ToxFile 1965-2010/Jun W1
         (c) format only 2010 Dialog
*File 156: ToxFile has been reloaded with the 2010 MeSH. Dialog
accession numbers have changed.
  File 159:Cancerlit 1975-2002/Oct
```

```
(c) format only 2002 Dialog
  File 162:Global Health 1983-2010/Jun W2
         (c) 2010 CAB International
  File 266:FEDRIP 2010/Apr
         Comp & dist by NTIS, Intl Copyright All Rights Res
 File 399:CA SEARCH(R) 1967-2010/UD=15224
         (c) 2010 American Chemical Society
*File 399: Use is subject to the terms of your user/customer agreement.
IPCR/8 classification codes now searchable as IC=. See HELP NEWSIPCR.
 File 444: New England Journal of Med. 1985-2010/May W5
         (c) 2010 Mass. Med. Soc.
      Set Items Description
? s protein(s)(aggregat$ or precipit$)(s)(CO2 or (Carbon dioxide))
        19470447 PROTEIN
               0 AGGREGAT$
               0 PRECIPIT$
          510670 CO2
          478579 CARBON DIOXIDE
      S1
               O PROTEIN(S) (AGGREGAT$ OR PRECIPIT$) (S) (CO2 OR (CARBON
                  DIOXIDE))
? s protein(s)(aggregat? or precipit?)(s)(CO2 or (Carbon dioxide))
Processing
Processing
Processing
Processing
Processing
Processing
Processed 10 of 42 files ...
Processing
Processed 30 of 42 files ...
Completed processing all files
        19470447 PROTEIN
         1545519 AGGREGAT?
         1323711 PRECIPIT?
          510670 CO2
          478579 CARBON DIOXIDE
             915 PROTEIN(S) (AGGREGAT? OR PRECIPIT?) (S) (CO2 OR (CARBON
      S2
                  DIOXIDE))
? rd
Processing
Processing
>>>Duplicate detection is not supported for File 391.
>>>Records from unsupported files will be retained in the RD set.
Processing - Examined 800 records
      S3
             535 RD (unique items)
```

? s s3 and py<=2004

```
Processing
Processed 10 of 42 files ...
Processing
Processing
Processed 20 of 42 files ...
Processing
Processing
Processed 30 of 42 files ...
>>>One or more prefixes are unsupported
>>> or undefined in one or more files.
Processing
Processing
Processed 40 of 42 files ...
Completed processing all files
             535 S3
        158115074 PY<=2004
             413 S3 AND PY<=2004
? s s4 and (co-precipitat? or coprecipit? or co-aggregat?)
             413 S4
            1436 CO-PRECIPITAT?
           49860 COPRECIPIT?
              92 CO-AGGREGAT?
              92 CO-AGGREGAT?
      S5
               1 S4 AND (CO-PRECIPITAT? OR COPRECIPIT? OR CO-AGGREGAT?
OR
                  CO-AGGREGAT?)
```

? t s5/5/1

Dialog eLink:

5/5/1 (Item 1 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

02215046 Genuine Article#: KL230 Number of References: 30

Title: APPLICATIONS OF SUPERCRITICAL FLUIDS IN THE CONTROLLED

RELEASE OF DRUGS

Author: TOM JW; LIM GB; DEBENEDETTI PG; PRUDHOMME RK

Corporate Source: PRINCETON UNIV, DEPT CHEM ENGN/PRINCETON//NJ/08544

Journal: ACS SYMPOSIUM SERIES, 1993, V 514, P 238-257

ISSN: 0097-6156

Language: ENGLISH Document Type: REVIEW

Geographic Location: USA

Subfile: SciSearch

Journal Subject Category: CHEMISTRY

Abstract: Supercritical fluids have been used to form two different types of microparticles intended for controlled drug release applications: drug-loaded polymer microspheres, and small protein particles. A poly(hydroxyacid), poly(D,L-lactic acid) (DL-PLA) and a pharmaceutical (lovastatin) have been dissolved in supercritical CO2 and coprecipitated by rapid expansion of the resulting supercritical solution (RESS) to form polymer-drug microspheres and microparticles ranging in size from 10 to 100 mum. Variations in the concentration of lovastatin in the precipitate correlated with changes in the precipitate's morphology, ranging from continuous drug-polymer networks, to microparticles, to microspheres. The formation of polymer-drug microparticles by RESS is the first step towards a feasible single-step, low-temperature process that yields solvent and surfactant-free microparticles suitable for controlled drug release. Two model proteins, catalase and insulin, have been dissolved in ethanol/water solution and fed continuously and simultaneously with supercritical CO2 into a crystallizer to precipitate the proteins. The use of supercritical CO2 as a gas anti-solvent (GAS) produced catalase and insulin particles ranging from 1 to 5 mum. Particle morphology ranged from microspheres, to rectangular-shaped particles, to needles. Micron-sized protein particles are needed in several controlled release formulations to accommodate the high potency and low dosage of such pharmaceuticals and to achieve a uniform dispersion of the drug in the injectable polymeric microspherical carrier. GAS crystallization is a potentially important process for comminution of proteins since conventional particle reduction methods (spray drying, lyophilization, milling, grinding) cannot produce the micron-sized protein particles needed for controlled release of highly active enzymes.

Descriptors: SCI

Identifiers: KeyWords Plus: CARBON-DIOXIDE; RAPID EXPANSION; CHOLESTEROL; CRYSTALLIZATION; EXTRACTION; OXIDATION; GASES

Cited References:

GE 3744329, 1989, MUELLER BW 9013285, 1990, GOMBOTZ WR CHANG CJ, 1990, V36, P939, AICHE J

CHANG CMJ, 1991, V7, P275, BIOTECHNOL PROGR DEBENEDETTI PG, 1990, V36, P1289, AICHE J DIXON DJ, 1991, V37, P1441, AICHE J GALE RW, 1987, V109, P920, J AM CHEM SOC GALLAGHER PM, 1989, V406, CH22, ACS S SERIES GALLAGHER PM, 1991, P45, 2ND P INT S SUP FLUI HAMMOND DA, 1985, V11, P393, APPL BIOCHEM BIOTECH HELLER J, 1984, MED APPLICATIONS CON JUNI K, 1987, V3, P209, CRC CRIT R THER DRUG KRUKONIS VJ, 1984, NOV AICHE ANN M SAN KUMAR SK, 1988, V1, P15, J SUPERCRIT FLUID LARSON KA, 1986, V2, P73, BIOTECHNOL PROGR LI VHK, 1987, CH1, CONTROLLED DRUG DELI LOTH H, 1986, V32, P265, INT J PHARM MATSON DW, 1986, V1, P242, ADV CERAM MATER MATSON DW, 1987, V26, P2298, IND ENG CHEM RES MOHAMED RS, 1989, V406, CH23, ACS S SERIES OTSUKA M, 1990, V62, P65, INT J PHARM RANDOLPH TW, 1988, V34, P1354, AICHE J RANDOLPH TW, 1988, V85, P2979, P NATL ACAD SCI USA RANDOLPH TW, 1988, V239, P387, SCIENCE REES ED, 1956, V63, P144, ARCH BIOCHEM BIOPHYS ROSEN HB, 1988, V2, P83, CONTROLLED RELEASE S SPENLEHAUER G, 1989, V292, P283, PROG CLIN BIOL RES TOM JW, 1991, V7, P403, BIOTECHNOL PROGR TOM JW, 1991, V22, P555, J AEROSOL SCI WEDER JKP, 1984, V15, P175, FOOD CHEM

? s (co-precipitat?) or coprecipitat?) (w) (acidification)

1436 CO-PRECIPITAT?
49283 COPRECIPITAT?
182806 ACIDIFICATION
S6 0 (CO-PRECIPITAT? OR COPRECIPITAT?) (W) (ACIDIFICATION)

? e au=golubovic m

Ref	Items	Index-term	
E1	1	AU=GOLUBOVIC	LM
E2	2	AU=GOLUBOVIC	LR
E3	70	*AU=GOLUBOVIC	M
E4	1	AU=GOLUBOVIC	M N
E5	35	AU=GOLUBOVIC	М.
E6	4	AU=GOLUBOVIC	MARIJANA
E7	3	AU=GOLUBOVIC	MIHAJLO
E8	4	AU=GOLUBOVIC	MIHAJLO N
E9	5	AU=GOLUBOVIC	MILETA
E10	1	AU=GOLUBOVIC	MILKA
E11	4	AU=GOLUBOVIC	MIRJANA

```
E12 5 AU=GOLUBOVIC MN
E13 6 AU=GOLUBOVIC N
                                 4 AU=GOLUBOVIC N.
    E14
    E15
                                 1 AU=GOLUBOVIC NC
  E16 1 AU=GOLUBOVIC NEVENKA
E17 2 AU=GOLUBOVIC NG
E18 6 AU=GOLUBOVIC R
E19 3 AU=GOLUBOVIC R.
E20 1 AU=GOLUBOVIC RADISAV
E21 1 AU=GOLUBOVIC RAJNA
E22 182 AU=GOLUBOVIC S
E23 3 AU=GOLUBOVIC S J
E24 4 AU=GOLUBOVIC S M
    E16
                                1 AU=GOLUBOVIC NEVENKA C
   E24
                               4 AU=GOLUBOVIC S M
  E26 1 AU=GOLUBOVIC S T G TO
E27 89 AU=GOLUBOVIC S.
   E25
                                1 AU=GOLUBOVIC S T G TOSIC
AU=GOLUBOVIC S TOSIC

E27 89 AU=GOLUBOVIC S.

E28 5 AU=GOLUBOVIC S.J.

E29 1 AU=GOLUBOVIC SD

E30 1 AU=GOLUBOVIC SJ

E31 5 AU=GOLUBOVIC SLAVICA

E32 1 AU=GOLUBOVIC SLOBODAN

E33 3 AU=GOLUBOVIC SM

E34 1 AU=GOLUBOVIC SM

E35 6 AU=GOLUBOVIC SNEZANA

E36 7 AU=GOLUBOVIC SNJEZANA

E37 2 AU=GOLUBOVIC SPELA

E38 1 AU=GOLUBOVIC SPELA

E38 1 AU=GOLUBOVIC SS

E40 4 AU=GOLUBOVIC SS

E40 4 AU=GOLUBOVIC ST

E41 2 AU=GOLUBOVIC ST

E41 2 AU=GOLUBOVIC T

E43 4 AU=GOLUBOVIC T

E44 3 AU=GOLUBOVIC T

E45 2 AU=GOLUBOVIC T

E46 3 AU=GOLUBOVIC V

E47 44 AU=GOLUBOVIC V

E48 1 AU=GOLUBOVIC V

E49 54 AU=GOLUBOVIC V
    E49
                                 54 AU=GOLUBOVIC V.
    E50
                                    2 AU=GOLUBOVIC VELIMIR ZORAN
```

Enter P or PAGE for more ? s e3:e6 or e11 and protein

```
110 AU=GOLUBOVIC M:AU=GOLUBOVIC MARIJANA
4 AU=GOLUBOVIC MIRJANA
19470447 PROTEIN
S7 110 AU='GOLUBOVIC M':AU='GOLUBOVIC MARIJANA' OR
AU='GOLUBOVIC
MIRJANA' AND PROTEIN
```

? s s7 and aggregate

```
110 S7
308943 AGGREGATE
S8 2 S7 AND AGGREGATE
```

? t s8/medium/all

Dialog eLink:

8/3/1 (Item 1 from file: 144) DIALOG(R)File 144: Pascal

(c) 2010 INIST/CNRS. All rights reserved. 16925889 PASCAL No.: 04-0590255

Preparation, optimization, and structures of cross-linked enzyme aggregates (CLEAs)

SCHOEVAART R; WOLBERS M W; GOLUBOVIC M; OTTENS M; KIEBOOM A P G; VAN RANTWIJK F; VAN DER WIELEN L A M; SHELDON R A

Biocatalysis and Organic Chemistry, Department of Biotechnology, Delft

University of Technology, Julianalaan 136, 2628 BL Delft, Netherlands; Industrial Fermentative Chemistry, Leiden University, P. O. Box 9502, 2300

RA Leiden, Netherlands; Bioseparation Technology, Department of Biotechnology, Delft University of Technology, Julianalaan 67, 2628 BC Delft, Netherlands

Journal: Biotechnology and bioengineering, 2004, 87 (6)

754-762

Language: English

Copyright (c) 2004 INIST-CNRS. All rights reserved.

Dialog eLink:

8/3/2 (Item 1 from file: 357)

DIALOG(R)File 357: Derwent Biotech Res. (c) 2010 Thomson Reuters. All rights reserved.

0347366 **DBA Accession No.:** 2004-19658

Preparation, optimization, and structures of cross-linked enzyme aggregates (CLEAs) for use in immobilization and optimization

Author: SCHOEVAART R; WOLBERS MW; GOLUBOVIC M; OTTENS M; KIEBOOM APG; VAN RANTWIJK F; VAN DER WIELEN LAM; SHELDON RA

Corporate Affiliate: Delft Univ Technol Delft Univ Technol Leiden Univ

Corporate Source: Sheldon RA, Delft Univ Technol, Dept Biotechnol, Julianalaan 136,

NL-2628 BL Delft, Netherlands

Journal: BIOTECHNOLOGY AND BIOENGINEERING (87, 6, 754-762) 2004

ISSN: 0006-3592 Language: English

? t s7/5/all

Dialog eLink:

7/5/1 (Item 1 from file: 155)

DIALOG(R)File 155: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

33128725 PMID: 20162031 Record Identifier: PMC2821129

Laryngeal adenoid cystic carcinoma.

Zvrko E; Golubovic M

Clinic for Otorhinolaryngology and Maxillofacial Surgery, Center for Pathology, Clinical

Center of Montenegro, Podgorica, Montenegro. elvirz@t-com.me

Acta otorhinolaryngologica Italica - organo ufficiale della Societa italiana di

otorinolaringologia e chirurgia cervico-facciale (Italy) Oct 2009, 29 (5) p279-82,

ISSN: 1827-675X--Electronic 0392-100X--Linking **Journal Code:** 8213019

Publishing Model Print

Document type: Case Reports; Journal Article

Languages: ENGLISH

Main Citation Owner: NLM Other Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

Adenoid cystic carcinomas are malignant tumours and occur in the major and the minor salivary glands. Laryngeal adenoid cystic carcinomas are rare and account for less than 1% of all malignant tumours in the larynx. Adenoid cystic carcinoma is characterised by slow progression, multiple recurrences and late distant metastasis. The aetiology of adenoid cystic carcinoma remains unknown. They usually originate in the supraglottic or subglottic area. Wide-margin surgery alone or in combination with post-operative radiotherapy is the best tumour management. In this article, the case of laryngeal adenoid cystic carcinoma is described in a 55-year-old male patient who presented with a 3-month history of prelaryngeal pain. The patient underwent total laryngectomy and post-operative radiotherapy. For patients with laryngeal adenoid cystic carcinomas, regular and long-term follow-up is mandatory, in order to detect relapses and metastases.

Tags: Male

Descriptors: *Carcinoma, Adenoid Cystic--pathology--PA; *Carcinoma, Adenoid Cystic --surgery--SU; *Laryngeal Neoplasms--pathology--PA; *Laryngeal Neoplasms --surgery--SU; Biopsy; Carcinoma, Adenoid Cystic--radiography--RA; Humans; Laryngeal Neoplasms--radiography--RA; Laryngectomy; Middle Aged; Tomography, X-Ray Computed

Record Date Created: 20100217 **Record Date Completed:** 20100521 Dialog eLink:

7/5/2 (Item 2 from file: 155)

DIALOG(R)File 155: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

19459202 **PMID:** 19707981

Rare type of quadricuspid aortic valve requiring surgical replacement.

Susak S; Torbica V; Velicki L; Golubovic M

Clinic for Cardiovascular Surgery, Institute of Cardiovascular Diseases of Vojvodina, Novi Sad, Serbia.

Thoracic and cardiovascular surgeon (Germany) Sep 2009, 57 (6) p364-6, ISSN:

1439-1902--Electronic 0171-6425--Linking **Journal Code:** 7903387

Publishing Model Print-Electronic

Document type: Case Reports; Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

Quadricuspid aortic valve, a rare congenital anomaly, is often related to severe aortic regurgitation and has a significant morbidity. The first described case was reported in 1862. Quadricuspid aortic valve is, in most cases, an isolated malformation, but it can be associated with other concomitant anomalies. We present here the case of a quadricuspid aortic valve discovered by intraoperative transesophageal echocardiography and successfully replaced with a mechanical aortic valve. Georg Thieme Verlag KG Stuttgart New York.

Tags: Male

Descriptors: *Aortic Valve--surgery--SU; *Aortic Valve Insufficiency--surgery--SU; *Heart Defects, Congenital--surgery--SU; *Heart Valve Prosthesis Implantation; Aortic Valve--abnormalities--AB; Aortic Valve--ultrasonography--US; Aortic Valve Insufficiency--etiology--ET; Aortic Valve Insufficiency --ultrasonography--US; Echocardiography, Transesophageal; Heart Defects, Congenital--ultrasonography--US; Humans; Incidental Findings; Intraoperative Care; Middle Aged; Treatment Outcome

Record Date Created: 20090826 Record Date Completed: 20091112 Date of Electronic Publication: 20090825

Dialog eLink:

7/5/3 (Item 3 from file: 155)

DIALOG(R)File 155: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

18253736 **PMID:** 18044331

[Massive GIST of the stomach--case report]

Jovovic M; Bajic P; Golubovic M; Dobricanin V; Maric I Klinicki centar Crue Gore, Hirurska klinika, Podgorica.

Acta chirurgica Iugoslavica (Serbia and Montenegro) 2007, 54 (2) p127-9, ISSN:

0354-950X--Print 0354-950X--Linking **Journal Code:** 0372631

Publishing Model Print

Document type: Case Reports; English Abstract; Journal Article

Languages: SERBIAN

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

Gastrointestinal stromal tumors (GIST) are rare mesenchimal neoplasmas of the gastrointestinal tract. The diagnosis of this tumors are oftenly very difficult. Patients with this tumor are usually addmited to the hospital cause of the gastrointestinal bleeding, abdominal pain, abdominal distension, disphagia, obstructive jaundice and bowel obsstruction. In this case report, we present a 86 year old patient with massive GIST of the stomach which was not preoperatively diagnosed.

Tags: Female

Descriptors: *Gastrointestinal Stromal Tumors--pathology--PA; *Stomach Neoplasms --

pathology--PA; Aged, 80 and over; Humans

Record Date Created: 20071129 **Record Date Completed:** 20080115

Dialog eLink:

7/5/4 (Item 4 from file: 155)

DIALOG(R)File 155: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

18197658 **PMID:** 17514752

A method for lipase co-precipitation in a biodegradable protein matrix.

Golubovic M; van Hateren S H; Ottens M; Witkamp G J; van der Wielen L A M Delft University of Technology, Department of Biotechnology, Julianalaan 67, 2628 BC Delft, The Netherlands.

Biotechnology and bioengineering (United States) Dec 15 2007, 98 (6) p1209-18,

ISSN: 0006-3592--Print 0006-3592--Linking **Journal Code:** 7502021

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

This article presents a novel method for immobilization of active ingredients. The method is based on CO(2) aided active ingredient co-precipitation with glycinin, a biodegradable protein matrix from edible soybean protein. Glycinin precipitates abundantly under isoelectric conditions and serves as the matrix within which the active substance is

trapped during the precipitation process. The enzyme lipase from Candida rugosa was successfully co-precipitated into the protein pellet to prove the principle. It was shown that the lipase within the co-precipitate retained lipase and esterase activity under different pH conditions. In some cases the activity was even higher than the activity of crude lipase, possibly due to the protective role of the matrix protein. Due to the retained lipase activity and food-grade quality of the binary precipitate, it has potential of being used in the food or pharmaceutical industry. Additional quality of the binary precipitate is the potentially significantly reduced downstream processing due to the fact that no organic solvents or precipitants were used in the precipitation process. Copyright 2007 Wiley Periodicals, Inc.

Descriptors: *Biotechnology--methods--MT; *Candida--enzymology--EN; *Lipase-chemistry --CH; *Soybean Proteins--chemistry--CH; Cells, Immobilized; Chemical Precipitation; Globulins--chemistry--CH; Microscopy, Electron, Scanning; Multiprotein

Complexes--chemistry--CH

CAS Registry No.: 0 (Globulins); 0 (Multiprotein Complexes); 0 (Soybean Proteins);

9007-93-6 (glycinin)

Enzyme No.: EC 3.1.1.3 (Lipase) Record Date Created: 20071030 Record Date Completed: 20080115

Dialog eLink:

7/5/5 (Item 5 from file: 155)

DIALOG(R)File 155: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

16631625 **PMID:** 15969506

Novel method for the production of pure glycinin from soybeans.

Golubovic Marijana; van Hateren Stef H; Ottens Marcel; Witkamp Geert-Jan; van der Wielen Luuk A M

Department of Biotechnology, Delft University of Technology, The Netherlands. Journal of agricultural and food chemistry (United States) Jun 29 2005, 53 (13) p5265-9, **ISSN:** 0021-8561--Print 0021-8561--Linking **Journal Code:** 0374755

Publishing Model Print

Document type: Journal Article; Research Support, Non-U.S. Gov't

Languages: ENGLISH
Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

A novel method for the purification of glycinin from soy meal is presented. The method is based on the isoelectric precipitation of glycinin by using carbon dioxide as a volatile precipitant. Gaseous CO(2) was pressurized into the protein solution, thus lowering the pH and initiating glycinin precipitation. Pressurization and, consequently, acidification were done in a slow and controlled manner, with the end point of pH 6.4. The acidity of the protein solution was well controlled via the pressure of gaseous CO(2). In this way

simultaneous precipitation of other soybean proteins was prevented and very pure glycinin was obtained. Approximately 40% of the glycinin present in the protein solution was recovered with purity as high as 98%. The purification process was successfully performed on both small and large scales, without affecting glycinin purity.

Descriptors: *Globulins--isolation and purification--IP; *Soybeans--chemistry--CH; Carbon Dioxide; Chemical Precipitation; Globulins--ultrastructure--UL; Hydrogen-Ion Concentration; Microscopy, Electron, Scanning; Pressure; Solubility; Soybean Proteins **CAS Registry No.:** 0 (Globulins); 0 (Soybean Proteins); 124-38-9 (Carbon Dioxide); 9007-93-6 (glycinin)

Record Date Created: 20050622 **Record Date Completed:** 20050815

Dialog eLink:

7/5/6 (Item 6 from file: 155)

DIALOG(R)File 155: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

16110555 **PMID:** 15329933

Preparation, optimization, and structures of cross-linked enzyme aggregates (CLEAs).

Schoevaart R; Wolbers M W; Golubovic M; Ottens M; Kieboom A P G; van Rantwijk F; van der Wielen L A M; Sheldon R A

Biocatalysis and Organic Chemistry, Department of Biotechnology, Delft University of Technology, Julianalaan 136, 2628 BL, The Netherlands.

Biotechnology and bioengineering (United States) Sep 20 2004, 87 (6) p754-62,

ISSN: 0006-3592--Print 0006-3592--Linking **Journal Code:** 7502021

Publishing Model Print

Document type: Comparative Study; Evaluation Studies; Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

The broad applicability of the cross-linking of enzyme aggregates to the effective immobilisation of enzymes is demonstrated and the influence of many parameters on the properties of the resulting CLEAs is determined. The relative simplicity of the operation ideally lends itself to high-throughput methodologies. The aggregation method was improved up to 100% activity yield for any enzyme. For the first time, the physical structures of CLEAs are elucidated. Copyright 2004 Wiley Periodicals, Inc.

Descriptors: *Cross-Linking Reagents--chemistry--CH; *Enzymes--chemistry--CH; *Enzymes --ultrastructure--UL; *Multiprotein Complexes--chemistry--CH; *Multiprotein Complexes--isolation and purification--IP; Enzymes, Immobilized--chemistry--CH; Enzymes, Immobilized--isolation and purification--IP; Enzymes, Immobilized--ultrastructure--UL; Fractional Precipitation; Multiprotein Complexes--isolation and purification--IP; Particle Size;

Protein Conformation

CAS Registry No.: 0 (Cross-Linking Reagents); 0 (Enzymes); 0 (Enzymes,

Immobilized); 0 (Multiprotein Complexes)

Record Date Created: 20040826 **Record Date Completed:** 20050322

Dialog eLink:

7/5/7 (Item 7 from file: 155)

DIALOG(R)File 155: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

13984931 **PMID:** 11089375

[Subcutaneous pseudoaneurysm of the left ventricle--a rare complication of ischemic dilated cardiomyopathy]

Supkutana pseudoaneurizma leve komore--retka komplikacija ishemijske dilatativne kardiomiopatije.

Mijatov M; Jonjev Z; Konstantinovic Z; Golubovic M; Radovanovic N

Univerzitetska klinika za kardiovaskularnu hirurgiju, Sremska Kamenica, Medicinski fakultet, Novi Sad.

Medicinski pregled (YUGOSLAVIA) May-Jun 2000, 53 (5-6) p301-4, ISSN: 0025-

8105--Print 0025-8105--Linking **Journal Code:** 2985249R

Publishing Model Print

Document type: Case Reports; English Abstract; Journal Article

Languages: CROATIAN
Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

INTRODUCTION: Pseudoaneurysm of the heart is extremely rare in cardiology and cardiac surgery. It can be presented as a complication of myocardial infarction, cardiac trauma or surgical intervention. CASE PRESENTATION: 9 years after by-pass surgery combined with left ventricle aneurysmectomy a 69-year-old patient was admitted in hospital after full cardiologic examination. On admission, during routine chest examination 9 years after by-pass surgery combined with left ventricle aneurysmectomy, a great pulsatile mass was found in the region of left mammilla++. A left ventricle aneurysm (aneurysm per magna) was confirmed by all noninvasive and invasive tests, and new surgical aneurysmectomy was indicated. The existence of pseudoaneurysm was suspected by intraoperative transesophageal echocardiography and during the operation a false aneurysm was finally confirmed. DISCUSSION: False aneurysm develops after acute rupture of an infarcted left ventricle area. It is usually fatal, but if the adhesion or pericardial fibrosis exists and is adherent to epicardium it can create a saccular cavity (hemopericardium). Persistent communication between the left ventricle and hemopericardium can create false aneurysm of different size and shape. In more than 50% of patients false aneurysm is found accidentally. In most cases the pseudoaneurysm is asymptomatic and the treatment is surgical. CONCLUSION: False aneurysms as case

presentations are very rare. Sometimes they are difficult to confirm prior to surgery; even if full diagnostic screening was arranged (including 2-D transthoracic echocardiography, transesophageal echocardiography and complete hemodynamic investigation).

Tags: Male

Descriptors: *Aneurysm, False--etiology--ET; *Cardiomyopathy, Dilated--complications--CO; *Heart Aneurysm--etiology--ET; Aged; Aneurysm, False--diagnosis--DI; Aneurysm, False--surgery--SU; Heart Aneurysm--diagnosis--DI; Heart

Aneurysm--surgery--SU; Humans Record Date Created: 20001204 Record Date Completed: 20001214

Dialog eLink:

7/5/8 (Item 8 from file: 155)

DIALOG(R)File 155: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

13872015 **PMID:** 10953555

[Comparison of preoperative and postoperative hemodynamic parameters in replacement or reconstruction of the mitral valve in ischemic dilated cardiomyopathy]

Uporedivanje preoperativnih i postoperativnih vrednosti hemodinamickih parametara kod zamene i rekonstrukcije mitralnog zaliska u ishemicnoj dilatativnoj kardiomiopatiji.

Mijatov M; Jonjev Z; Konstantinovic Z; Golubovic M; Radovanovic N

Institut za kardiovaskularne bolesti Univerzitetska klinika za kardiovaskularnu hirurgiju, Sremska Kamenica.

Medicinski pregled (YUGOSLAVIA) Jan-Feb 2000, 53 (1-2) p68-73, ISSN: 0025-

8105--Print 0025-8105--Linking **Journal Code:** 2985249R

Publishing Model Print

Document type: Comparative Study; English Abstract; Journal Article

Languages: CROATIAN
Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

INTRODUCTION: Ischemic mitral insufficiency is a clinical syndrome described as a consequence of the coronary artery disease where the basic problem is blood regurgitation between the left ventricle and left atrium following mitral annulus dilatation. Mitral regurgitation occurs in different degrees during the natural evolution of the ischemic heart disease. The main reason for the existence of mitral regurgitation is global deterioration in the left ventricle geometry as a consequence of myocardial infarction or/and left ventricle dilatation. Surgical correction of this problem is possible by simultaneous correction of mitral insufficiency (repair or replacement) and complete myocardial revascularisation. MATERIAL AND METHODS: Complete hemodynamic monitoring was followed by Swan-Ganz catheter including: central venous pressure, mean pulmonary artery pressure, pulmonary capillary wedge pressure, cardiac output,

cardiac index and pulmonary vascular resistance. All surgical procedures were performed in extracorporeal circulation (ECC) with membrane oxygenator using moderate systemic hypothermia and transseptal surgical approach to mitral valve. Hemodynamic parameters were followed before and after ECC, immediately after surgery and during the first 48 hours after operation in the intensive care unit. In 88 patients posterior semicircular annuloplasty by N. Radovanovic was performed whereas in 13 patients mitral valve replacement was done. RESULTS: There is a great, statistically significant hemodynamic improvement after the surgical procedure and during the continuous 48 hours monitoring in the intensive care unit no matter if mitral repair or replacement was done. No statistically significant difference was recorded between these two groups considering that the hemodynamic improvement is very similar. DISCUSSION: Simultaneous surgical procedures, including myocardial revascularization, mitral and usually consecutive tricuspid insufficiency correction, are a very common surgical problem with higher operative risk than isolated coronary bypass procedures. In 88 cases where mitral reconstruction was possible, posterior semicircular reductive annuloplasty was performed. Thus mitral annulus area reduction is achieved preserving its physiologic shape and avoiding rigidity. Mitral valve replacement includes implantation of the latest generation of bileaflet valve prosthesis and operative technique that preserves subvalvular apparatus to maintain myocardial contractility as much as possible. This policy and also good immediate postoperative care, improve the hemodynamic status in both groups. CONCLUSION: All hemodynamic parameters followed by ECC and 48 hours in the intensive care unit were significantly improved no matter whether mitral reconstruction or replacement was done. There is no statistically significant difference in hemodynamic parameters and clinical improvement between these two groups. Carefully chosen operative tactic and techniques as well as good preoperative and postoperative care may explain these very good results.

Tags: Female; Male

Descriptors: *Cardiomyopathy, Dilated--complications--CO; *Hemodynamics; *Mitral Valve --surgery--SU; *Mitral Valve Insufficiency--surgery--SU; *Myocardial Ischemia-complications--CO; Cardiomyopathy, Dilated--physiopathology--PP; Cardiomyopathy, Dilated --surgery--SU; Heart Valve Prosthesis Implantation; Humans; Middle Aged; Mitral Valve Insufficiency--physiopathology--PP; Myocardial Ischemia --

physiopathology--PP; Myocardial Revascularization

Record Date Created: 20001026 **Record Date Completed:** 20001026

Dialog eLink:

7/5/9 (Item 9 from file: 155)

DIALOG(R)File 155: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

13451934 **PMID:** 10352502

[Diagnostic importance of fibronectin in chronic liver diseases]

Dijagnosticki znacaj fibronektina u hronicnim bolestima jetre.

Golubovic M; Majkic-Singh N; Markovic S; Sumarac Z; Obradovic I Institut za medicinsku biohemiju, Klinicki centar Srbije, Beograd.

Medicinski pregled (YUGOSLAVIA) Jan-Feb 1999, 52 (1-2) p35-8, ISSN: 0025-

8105--Print 0025-8105--Linking **Journal Code:** 2985249R

Publishing Model Print

Document type: English Abstract; Journal Article

Languages: CROATIAN **Main Citation Owner:** NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

Plasma fibronectin was determined in 29 patients with decompensated cirrhosis (7 patients had bacterial infection) and 23 patients with malignant liver disease. The obtained values were compared with the fibronectin values in 20 healthy subjects belonging to the control group in order to determine the possible diagnostic value of this dimer glycoprotein of high molecular weight whose role in the organism has not been completely explained. Fibronectin was determined on nephelometer with the use of specific antiserum by Behringwerke. The results expressed as mean values and SD were compared with monofactorial variance analysis (method One-way ANOVA). Fibronectin values in patients with liver cirrhosis were statistically significantly lower than in the control group (p < 0.01), which is also the case with correlation with malignant liver disease (p < 0.01). The fibronectin values in patients with malignant diseases were almost the same as the control group values (p < 0.01). In 7 patients with liver cirrhosis and bacterial infection the fibronectin values were statistically significantly higher in relation to those in the remaining 22 patients with cirrhosis but without bacterial infection (p < 0.001). The investigation in this study indicated that the decrease of mean fibronectin values is related to hepatic failure which is of diagnostic value, while normal values in malignant diseases do not favor the opinion on fibronectin as a tumor marker. Higher fibronectin values in infection in patients with liver cirrhosis are not clear, which indicated the total complexity of the relation between fibronectin as a dimer glycoprotein and chronic liver diseases including malignant.

Tags: Female; Male

Descriptors: *Fibronectins--blood--BL; *Liver Cirrhosis--diagnosis--DI; *Liver Neoplasms --diagnosis--DI; Bacterial Infections--complications--CO; Biological Markers--blood--BL; Chronic Disease; Humans; Liver Cirrhosis--blood--BL; Liver

Cirrhosis --complications--CO; Liver Neoplasms--blood--BL; Middle Aged

CAS Registry No.: 0 (Biological Markers); 0 (Fibronectins)

Record Date Created: 19990625 **Record Date Completed:** 19990625

Dialog eLink:

7/5/10 (Item 10 from file: 155) DIALOG(R)File 155: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

11439815 **PMID:** 17977408

[Significance of laboratory tests for differential diagnosis of acute renal allograft rejection and acute cyclosporine nephrotoxicity]

Znacaj laboratorijskih testova za diferencijalnu dijagnostiku akutnog odbacivanja transplantisanog bubrega i akutne ciklosporinske nefrotoksicnosti.

Simic-Ogrizovic S; Djukanovic Lj; Golubovic M; DimitrijevicZ; Mimic-Oka J; Simic T Srpski arhiv za celokupno lekarstvo (Serbia and Montenegro) May-Jun 1994, 122 (5-6) p133-6, **ISSN:** 0370-8179--Print 0370-8179--Linking **Journal Code:** 0027440

Publishing Model Print

Document type: English Abstract; Journal Article

Languages: SERBIAN

Main Citation Owner: NLM

Record type: MEDLINE; Completed **Subfile:** INDEX MEDICUS; Toxbib

The most frequent causes of renal allograft function deterioration in early postransplantation period are aucte rejection (AR) and acute cyclosporine nephotoxicity (CyA NT). In order to contribute to noninvasive diagnostics in differential diagnosis of these two disorders, glomerular and tubular function in 40 patients during 2-3 weeks after renal transplantation, were followed-up. The results showed that ischaemia, during any act of transplantation provoked functional and structural disorders of renal allografts. During acute rejection serum creatinine level was increased diuresis, sodium and beta-2 microglobulin levels were decreased, whyle there was no significant change in the urinary enzymes ativity. In acute CyA NT there was significantly greater fractional excretion of sodium and beta-2 mikroblobulin, as well as activity of N-acetly-beta-d glukosaminidase and alkaline phosphatase in urine in comparison to other examined groups.

Tags: Female; Male

Descriptors: *Cyclosporine--adverse effects--AE; *Graft Rejection--diagnosis--DI; *Immunosuppressive Agents--adverse effects--AE; *Kidney Diseases --chemically induced--CI; *Kidney Transplantation; Acute Disease; Adolescent; Adult; Diagnosis, Differential; Humans; Kidney Diseases--diagnosis--DI

CAS Registry No.: 0 (Immunosuppressive Agents); 59865-13-3 (Cyclosporine)

Record Date Created: 20071105 **Record Date Completed:** 20080108

Dialog eLink:

7/5/11 (Item 11 from file: 155) DIALOG(R)File 155: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

11114807 **PMID:** 8190192

Changes of urinary beta-2-microglobulin after renal transplantation.

Simic-Ogrizovic S; Djukanovic L; Golubovic M

Nephron (SWITZERLAND) 1994, 66 (3) p354-5, ISSN: 0028-2766--Print 0028-

2766--Linking **Journal Code:** 0331777

Publishing Model Print; Comment on Nephron. 1992;61(4):485-6 PMID 1501754

Document type: Comment; Letter

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

Tags: Female; Male

Descriptors: *Kidney Transplantation; *beta 2-Microglobulin--urine--UR; Adolescent;

Adult; Humans; Middle Aged

CAS Registry No.: 0 (beta 2-Microglobulin)

Record Date Created: 19940622 **Record Date Completed:** 19940622

Dialog eLink:

7/5/12 (Item 12 from file: 155) DIALOG(R)File 155: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

09789019 **PMID:** 2075539

[Ammoniemia in portosystemic encephalopathy--diagnostic, differential diagnostic and prognostic significance

Amoniemija u porto sistemskoj encefalopatiji-dijagnosticki, diferencijalno dijagnosticki i prognosticki znacaj.

Marisavljivic A; Golubovic M; Tomic D; Krstic M

Emergency Centre, University School of Medicine, Belgrade.

Srpski arhiv za celokupno lekarstvo (YUGOSLAVIA) May-Jun 1990, 118 (5-6) p185-91, **ISSN:** 0370-8179--Print 0370-8179--Linking **Journal Code:** 0027440

Publishing Model Print

Document type: English Abstract; Journal Article

Languages: SERBIAN

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

One year prospective study of 25 cirrhotic patients with portal systemic encephalopathy (PSE) admitted to the Emergency Care Centre in Belgrade was performed in order to investigate the significance of clinical, biochemical and electroencephalographic (EEG) parameters and blood ammonia in the diagnosis, differential diagnosis and prognosis of PSE. 15 cirrhotic patients without PSE (of comparable age, sex, duration and etiology of liver cirrhosis) constituted the control group. Ammonia levels were elevated in 84% of patients with PSE (112 +/- 72 mumol/I) and reached normal range within 3 +/- 0.44 days, but with no correlation to clinical improvement (p greater than 0.1). Ammonia levels correlated with the severity of PSE (p less than 0.05), but not with other biochemical parameters (prothrombin time, bilirubin, albumin, urea, creatinine, potassium). Overall

mortality was 44% and was strongly correlated (p less than 0.01) to the severity of PSE. In addition, the mortality in patients with gastrointestinal bleeding and PSE was higher (p less than 0.05), than in PSE precipitated by other conditions. We concluded that the ammonia may be a primary diagnostic parameter for PSE in the absence of the most important diagnostical methods (EEG, psychometric tests). Secondly, ammonia are of great diagnostic importance in patients with coma of unknown origin and can help in deciding admission priorities. The ammonia levels do not appear to be a useful prognostic factor.

Tags: Female; Male

Descriptors: *Ammonia--blood--BL; *Hepatic Encephalopathy--diagnosis--DI; Diagnosis, Differential; Electroencephalography; Hepatic Encephalopathy --blood--BL; Hepatic Encephalopathy--physiopathology--PP; Humans; Middle Aged; Prognosis;

Prospective Studies

CAS Registry No.: 7664-41-7 (Ammonia)

Record Date Created: 19910418 **Record Date Completed:** 19910418

Dialog eLink:

7/5/13 (Item 13 from file: 155) DIALOG(R)File 155: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

08290459 **PMID:** 3798827

[Diagnostic importance of LDH activity in the chamber fluid in intraocular tumors]

Dijagnosticki znacaj aktivnosti LDH u komornoj tecnosti kod intraokularnih tumora.

Golubovic M; Ivanovic I; Jovanovic S

Vojnosanitetski pregled. Military-medical and pharmaceutical review (YUGOSLAVIA)

Sep-Oct 1986, 43 (5) p364-6, **ISSN:** 0042-8450--Print 0042-8450--Linking

Journal Code: 21530700R Publishing Model Print

Document type: English Abstract; Journal Article

Languages: SERBIAN

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

Descriptors: *Aqueous Humor--enzymology--EN; *Clinical Enzyme Tests; *Eye Neoplasms --diagnosis--DI; *L-Lactate Dehydrogenase--analysis--AN; *Retinoblastoma --diagnosis--DI; Cataract--enzymology--EN; Choroid Neoplasms--diagnosis--DI; Choroid Neoplasms--enzymology--EN; Eye Neoplasms--enzymology--EN; Humans; Melanoma --diagnosis--DI; Melanoma--enzymology--EN; Retinoblastoma--enzymology--EN

Enzyme No.: EC 1.1.1.27 (L-Lactate Dehydrogenase)

Record Date Created: 19870129

Record Date Completed: 19870129

Dialog eLink:

7/5/14 (Item 14 from file: 155) DIALOG(R)File 155: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

07383374 **PMID:** 6677378

[Studies on enzymatic activity in the aqueous humor]

Les recherches sur l'activite enzymatique dans l'humeur aqueuse.

Stanojevic-Paovic A; Golubovic M; Jovanovic S; Ivanovic I

Bulletins et memoires de la Societe française d'ophtalmologie (FRANCE) 1983, 95

p550-3, **ISSN:** 0081-1092--Print 0081-1092--Linking **Journal Code:** 7503471

Publishing Model Print

Document type: Journal Article

Languages: FRENCH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

Descriptors: *Aqueous Humor--enzymology--EN; *Cataract--enzymology--EN;

Humans

Record Date Created: 19840817 **Record Date Completed:** 19840817

Dialog eLink:

7/5/15 (Item 15 from file: 155) DIALOG(R)File 155: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

04642597 **PMID:** 4584356

[Short retrospection on the history of Medimurje and the development of health services]

Kratak osvrt na historiju Medimurja i razvoj zdravstvene sluzbe.

Golubovic M

Lijec nic ki vjesnik (YUGOSLAVIA) Aug 1973, 95 (8) p470-3, ISSN: 0024-3477--

Print 0024-3477--Linking **Journal Code:** 0074253

Publishing Model Print

Document type: Historical Article; Journal Article

Languages: CROATIAN **Main Citation Owner:** NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS; HISTORY OF MEDICINE

Descriptors: *Community Health Services--history--HI; History, 20th Century;

Humans; Retrospective Studies; Yugoslavia

Record Date Created: 19740111 **Record Date Completed:** 19740111

Dialog eLink:

7/5/16 (Item 16 from file: 155)
DIALOG(R)File 155: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

04484425 **PMID:** 4658534

[BCG vaccination and residual immunization during the child's growth]

BCG vakcina i ostale imunizacije u decijem uzrastu. Horvat-Grubac A; Golubovic M; Miletic-Cmelic I

Narodno zdravlje (YUGOSLAVIA) Jul-Aug 1972, 28 (7) p251-5, ISSN: 0027-

8025--Print 0027-8025--Linking **Journal Code:** 0404440

Publishing Model Print

Document type: Journal Article Languages: CROATIAN Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

Descriptors: *BCG Vaccine; Adolescent; Child; Child, Preschool; Diphtheria Toxoid; Humans; Immunization Schedule; Infant; Pertussis Vaccine; Preventive Health Services;

Seasons; Smallpox Vaccine; Tetanus Toxoid

CAS Registry No.: 0 (BCG Vaccine); 0 (Diphtheria Toxoid); 0 (Pertussis Vaccine); 0

(Smallpox Vaccine); 0 (Tetanus Toxoid) Record Date Created: 19730608 Record Date Completed: 19730608

Dialog cLink:

7/5/17 (Item 1 from file: 5)

DIALOG(R)File 5: Biosis Previews(R)

(c) 2010 The Thomson Corporation. All rights reserved.

0021187760 Biosis No.: 200900529197 Oncocytoma of the lung. Case report

Author: Nenezic T (Reprint); Savjak D; Vuckovic L; Vukmirovic F; Golubovic M

Author Address: Ctr Clin, Podgorica, Serbia**Serbia

Journal: Virchows Archiv 455 (Suppl. 1): p 355-356 AUG 2009 2009

Conference/Meeting: 22nd European Congress of Pathology Florence, ITALY

September 04 -09, 2009; 20090904

Sponsor: European Soc Pathol

ISSN: 0945-6317

Document Type: Meeting; Meeting Poster

Record Type: Citation Language: English DESCRIPTORS:

Major Concepts: Pulmonary Medicine--Human Medicine, Medical Sciences; Oncology--Human Medicine, Medical Sciences; Geriatrics--Human Medicine, Medical Sciences Biosystematic Names: Hominidae--Primates, Mammalia, Vertebrata, Chordata,

Animalia

Organisms: human (Hominidae)--aged

Organisms: Parts Etc: lung--respiratory system; cytoplasm; nucleoli

Common Taxonomic Terms: Animals; Chordates; Humans; Mammals; Primates;

Vertebrates

Diseases: lung oncocytoma--respiratory system disease, neoplastic disease, pathology,

surgery, symptom

Chemicals & Biochemicals: chromatin

Methods & Equipment: histological examination--laboratory techniques, histology and

cytology techniques

Miscellaneous Terms: Concept Codes: disease prognosis; mitosis; Meeting Poster Concept Codes:

00520 General biology - Symposia, transactions and proceedings

11105 Anatomy and Histology - Surgery

12502 Pathology - General

12512 Pathology - Therapy

16004 Respiratory system - Physiology and biochemistry

16006 Respiratory system - Pathology

24004 Neoplasms - Pathology, clinical aspects and systemic effects

24500 Gerontology **Biosystematic Codes:**

86215 Hominidae

Dialog eLink:

7/5/18 (Item 2 from file: 5)

DIALOG(R)File 5: Biosis Previews(R)

(c) 2010 The Thomson Corporation. All rights reserved.

0021187759 **Biosis No.:** 200900529196

EGFR expression in lung squamous cell carcinoma and correlation with prognosis

Author: Vuckovic L (Reprint); Latinovic Tadic L; Eri Z; Savjak D; Nenezic T;

Vukmirovic F; Golubovic M

Author Address: Ctr Clin, Podgorica, Serbia**Serbia

Journal: Virchows Archiv 455 (Suppl. 1): p 355 AUG 2009 2009

Conference/Meeting: 22nd European Congress of Pathology Florence, ITALY

September 04 -09, 2009; 20090904 Sponsor: European Soc Pathol

ISSN: 0945-6317

Document Type: Meeting; Meeting Poster

Record Type: Citation Language: English DESCRIPTORS:

Major Concepts: Clinical Chemistry--Allied Medical Sciences; Oncology--Human Medicine, Medical Sciences; Pulmonary Medicine--Human Medicine, Medical Sciences

Biosystematic Names: Hominidae--Primates, Mammalia, Vertebrata, Chordata,

Animalia

Organisms: human (Hominidae)

Organisms: Parts Etc: lung--respiratory system

Common Taxonomic Terms: Animals; Chordates; Humans; Mammals; Primates;

Vertebrates

Diseases: lung squamous cell carcinoma--respiratory system disease, neoplastic disease, pathology, mortality, surgery

Mesh Terms: Carcinoma, Squamous Cell (MeSH); Lung Neoplasms (MeSH)

Chemicals & Biochemicals: epidermal growth factor receptor {EGFR}--expression Methods & Equipment: immunohistochemical analysis--laboratory techniques,

immunologic techniques

Miscellaneous Terms: Concept Codes: disease prognosis; Meeting Poster **Concept Codes:**

00520 General biology - Symposia, transactions and proceedings

10006 Clinical biochemistry - General methods and applications

10064 Biochemistry studies - Proteins, peptides and amino acids

11105 Anatomy and Histology - Surgery

12502 Pathology - General

12512 Pathology - Therapy

16004 Respiratory system - Physiology and biochemistry

16006 Respiratory system - Pathology

17002 Endocrine - General

24004 Neoplasms - Pathology, clinical aspects and systemic effects

Biosystematic Codes:

86215 Hominidae

Dialog eLink:

7/5/19 (Item 3 from file: 5)

DIALOG(R)File 5: Biosis Previews(R)

(c) 2010 The Thomson Corporation. All rights reserved.

0019971051 **Biosis No.:** 200800017990

A method for lipase co-precipitation in a biodegradable protein matrix

Author: Golubovic M; van Hateren S H; Ottens M (Reprint); Witkamp G J; van der

Wielen L A M

Author Address: Delft Univ Technol, Dept Biotechnol, Julianalaan 67, NL-2628 BC

Delft, Netherlands**Netherlands

Author E-mail Address: m.ottens@tudelft.nl

Journal: Biotechnology and Bioengineering 98 (6): p 1209-1218 DEC 15 2007 2007

Item Identifier: doi:10.1002/bit.21499

ISSN: 0006-3592

Document Type: Article Record Type: Abstract Language: English

Abstract: This article presents a novel method for immobilization of active ingredients. The method is based on CO2 aided active ingredient co-precipitation with glycinm, a biodegradable protein matrix from edible soybean protein. Glycinin precipitates abundantly under isoelectric conditions and serves as the matrix within which the active substance is trapped during the precipitation process. The enzyme lipase from Candida rugosa was successfully co-precipitated into the protein pellet to prove the principle. It was shown that the lipase within the co-precipitate retained lipase and esterase activity under different PH conditions. In some cases the activity was even higher than the activity of crude lipase, possibly due to the protective role of the matrix protein. Due to the retained lipase, activity and food-grade quality of the binary precipitate, it has potential of being used in the food or pharmaceutical industry. Additional quality of the binary precipitate is the potentially significantly reduced downstream processing due to the fact that no organic solvents or precipitants were, used in the precipitation process.

Registry Numbers: 124-38-9: carbon dioxide; 9016-18-6: esterase; 9001-62-1: lipase

Enzyme Commission Number: EC 3.1.1.3: lipase

DESCRIPTORS:

Major Concepts: Enzymology--Biochemistry and Molecular Biophysics Biosystematic Names: Fungi Imperfecti or Deuteromycetes--Fungi, Plantae; Leguminosae-- Dicotyledones, Angiospermae, Spermatophyta, Plantae

Organisms: Candida rugosa (Fungi Imperfecti or Deuteromycetes); soy (Leguminosae)

Common Taxonomic Terms: Fungi; Microorganisms; Nonvascular Plants;

Angiosperms; Dicots; Plants; Spermatophytes; Vascular Plants

Chemicals & Biochemicals: carbon dioxide; esterase; glycinin; lipase--co-

precipitation; protein matrix--biodegradable

Miscellaneous Terms: Concept Codes: pH range

Concept Codes:

10060 Biochemistry studies - General

10802 Enzymes - General and comparative studies: coenzymes

51518 Plant physiology - Enzymes

Biosystematic Codes:

15500 Fungi Imperfecti or Deuteromycetes

26260 Leguminosae

Dialog eLink:

7/5/20 (Item 4 from file: 5)

DIALOG(R)File 5: Biosis Previews(R)

(c) 2010 The Thomson Corporation. All rights reserved.

18470312 **Biosis No.:** 200510164812

Novel method for the production of pure glycinin from soybeans

Author: Golubovic Marijana; van Hateren Stef H; Ottens Marcel; Witkamp Geert-Jan;

van der Wielen Luuk A M (Reprint)

Author Address: Delft Univ Technol, Dept Biotechnol, Julianalaan 67, NL-2628 BC

Delft, Netherlands**Netherlands

Author E-mail Address: L.A.M.vanderWielen@tnw.tudelft.nl

Journal: Journal of Agricultural and Food Chemistry 53 (13): p 5265-5269 JUN 29

2005 2005

ISSN: 0021-8561

Document Type: Article **Record Type:** Abstract **Language:** English

Abstract: A novel method for the purification of glycinin from soy meal is presented. The method is based on the isoelectric precipitation of glycinin by using carbon dioxide as a volatile precipitant. Gaseous CO2 was pressurized into the protein solution, thus lowering the pH and initiating glycinin precipitation. Pressurization and, consequently, acidification were done in a slow and controlled manner, with the end point of pH 6.4. The acidity of the protein solution was well controlled via the pressure of gaseous CO2. In this way simultaneous precipitation of other soybean proteins was prevented and very pure glycinin was obtained. Approximately 40% of the glycinin present in the protein solution was recovered with purity as high as 98%. The purification process was successfully performed on both small and large scales, without affecting glycinin purity.

Registry Numbers: 124-38-9: carbon dioxide

DESCRIPTORS:

Major Concepts: Biochemistry and Molecular Biophysics; Horticulture--Agriculture **Biosystematic Names:** Leguminosae--Dicotyledones, Angiospermae, Spermatophyta, Plantae

Organisms: soybean (Leguminosae)--vegetable crop

Common Taxonomic Terms: Angiosperms; Dicots; Plants; Spermatophytes; Vascular

Plants

Chemicals & Biochemicals: carbon dioxide; proteins; glycinin

Concept Codes:

10060 Biochemistry studies - General

10064 Biochemistry studies - Proteins, peptides and amino acids

51522 Plant physiology - Chemical constituents

53008 Horticulture - Vegetables

53012 Horticulture - Miscellaneous and mixed crops

Biosystematic Codes:

26260 Leguminosae

Dialog eLink:

7/5/21 (Item 5 from file: 5)

DIALOG(R)File 5: Biosis Previews(R)

(c) 2010 The Thomson Corporation. All rights reserved.

18047365 **Biosis No.:** 200400418154

Preparation, optimization, and structures of cross-linked enzyme aggregates (CLEAs)

Author: Schoevaart R; Wolbers M W; Golubovic M; Ottens M; Kieboom A P G; van

Rantwijk F; van der Wielen L A M; Sheldon R A (Reprint)

Author Address: Dept Biotechnol, Delft Univ Technol, Julianalaan 136, NL-2628 BL,

Delft, Netherlands**Netherlands

Author E-mail Address: r.a.sheldon@tnw.tudelft.nl

Journal: Biotechnology and Bioengineering 87 (6): p 754-762 September 20, 2004

2004

Medium: print **ISSN:** 0006-3592

Document Type: Article Record Type: Abstract Language: English

Abstract: The broad applicability of the cross-linking of enzyme aggregates to the effective immobilisation of enzymes is demonstrated and the influence of many parameters on the properties of the resulting CLEAs is determined, The relative simplicity of the operation ideally lends itself to high-throughput methodologies. The aggregation method was improved up to 100% activity yield for any enzyme. For the first time, the physical structures of CLEAs are elucidated. Copyright 2004 Wiley Periodicals, Inc.

DESCRIPTORS:

Major Concepts: Enzymology--Biochemistry and Molecular Biophysics; Methods and Techniques

Chemicals & Biochemicals: cross-linked enzyme aggregates--applications, optimization, preparation, structures; enzymes--applications, cross-linking, immobilization, properties, uses; proteins

Methods & Equipment: enzyme immobilization techniques--applied and field techniques

Miscellaneous Terms: Concept Codes: enzyme activity yields; high-throughput methodologies--applications

Concept Codes:

10064 Biochemistry studies - Proteins, peptides and amino acids

Dialog eLink:

7/5/22 (Item 6 from file: 5)

DIALOG(R)File 5: Biosis Previews(R)

(c) 2010 The Thomson Corporation. All rights reserved.

17646057 **Biosis No.:** 200400013041

Prolonged sulfonylurea treatment has no effect on lymphocyte PC-1 expression in patients with Type 2 diabetes mellitus.

Author: Antic S S (Reprint); Vlahovic P; Mitic M; Milojkovic M; Golubovic M

(Reprint); Stefanovic V

Author Address: Department of Endocrinology, Clinical Center, Nis,

Yugoslavia**Yugoslavia

Journal: Diabetes & Metabolism 29 (Hors serie 2): p 4S106 August 2003 2003

Medium: print

Conference/Meeting: 18th International Diabetes Federation Congress Paris, France

August 24-29, 2003; 20030824

ISSN: 1262-3636

Document Type: Meeting; Meeting Abstract

Record Type: Citation Language: English

Registry Numbers: 11028-71-0: concanavalin A; 4429-04-3: fructosamine; 21187-98-4:

gliclazide; 50-99-7Q; glucose; 58367-01-4Q; glucose; 16561-29-8; phorbol-12-

myristate-13-acetate **DESCRIPTORS**:

Major Concepts: Clinical Endocrinology--Human Medicine, Medical Sciences;

Pharmacology

Biosystematic Names: Hominidae--Primates, Mammalia, Vertebrata, Chordata,

Animalia

Organisms: human (Hominidae)--patient

Organisms: Parts Etc: blood--blood and lymphatics; lymphocyte--blood and

lymphatics, immune system; plasma--blood and lymphatics

Common Taxonomic Terms: Animals; Chordates; Humans; Mammals; Primates;

Vertebrates

Diseases: type 2 diabetes mellitus--endocrine disease/pancreas, metabolic disease

Mesh Terms: Diabetes Mellitus, Non-Insulin-Dependent (MeSH)

Chemicals & Biochemicals: PC-1--expression; concanavalin A; fructosamine; gliclazide-- antidiabetic-drug; glucose--fasting; phorbol-12-myristate-13-acetate; sulfonylurea

Methods & Equipment: body mass index--clinical techniques

Concept Codes:

00520 General biology - Symposia, transactions and proceedings 02506 Cytology - Animal

02508 Cytology - Human

10064 Biochemistry studies - Proteins, peptides and amino acids

10068 Biochemistry studies - Carbohydrates

12512 Pathology - Therapy

13020 Metabolism - Metabolic disorders

15002 Blood - Blood and lymph studies

15004 Blood - Blood cell studies

17002 Endocrine - General

17008 Endocrine - Pancreas

22002 Pharmacology - General

22005 Pharmacology - Clinical pharmacology

22016 Pharmacology - Endocrine

34502 Immunology - General and methods

Biosystematic Codes:

86215 Hominidae

Dialog eLink:

7/5/23 (Item 7 from file: 5)

DIALOG(R)File 5: Biosis Previews(R)

(c) 2010 The Thomson Corporation. All rights reserved.

15661591 Biosis No.: 200000379904

"LIFE-LINE": The Yugoslav Red Cross school for blood donation instructors

Author: Petrovic I (Reprint); Andjelic M (Reprint); Belic B (Reprint); Cankovic-Kadijevic M (Reprint); Dragisic Lj (Reprint); Djokic M (Reprint); Golubovic M (Reprint); Gruden S (Reprint); Nedeljkovic N (Reprint); Andjelic D (Reprint); Toncev Lj (Reprint); Radojevic B (Reprint); Micanovic Z (Reprint); Seslija A (Reprint); Filipovic M (Reprint); Janjatovic I (Reprint)

Author Address: Yugoslav Red Cross, Belgrade, Yugoslavia**Yugoslavia

Journal: Vox Sanguinis 78 (Suppl. 1): p P324 July, 2000 2000

Medium: print

Conference/Meeting: 26th Congress of the International Society of Blood Transfusion

Vienna, Austria July 09-14, 2000; 20000709

Sponsor: International Society of Blood Transfusion

ISSN: 0042-9007

Document Type: Meeting; Meeting Abstract

Record Type: Citation Language: English DESCRIPTORS:

Major Concepts: Education; Hematology--Human Medicine, Medical Sciences **Biosystematic Names:** Hominidae--Primates, Mammalia, Vertebrata, Chordata,

Animalia

Organisms: human (Hominidae)--patient

Organisms: Parts Etc: blood--blood and lymphatics

Common Taxonomic Terms: Animals; Chordates; Humans; Mammals; Primates;

Vertebrates

Methods & Equipment: blood donation--public health method

Miscellaneous Terms: Concept Codes: blood donation instructor--education; personal

communication; Meeting Abstract; Yugoslavian Red Cross School--educational

institution; Meeting Abstract

Concept Codes:

00514 General biology - General textbooks and audio-visual aids 00520 General biology - Symposia, transactions and proceedings

15002 Blood - Blood and lymph studies

15004 Blood - Blood cell studies

15006 Blood - Blood, lymphatic and reticuloendothelial pathologies

Biosystematic Codes:

86215 Hominidae

Dialog eLink:

7/5/24 (Item 8 from file: 5)

DIALOG(R)File 5: Biosis Previews(R)

(c) 2010 The Thomson Corporation. All rights reserved.

15194510 **Biosis No.:** 199900454170

Serum angiotensin converting enzyme as a marker of Ocular Sarcoidosis

Author: Janicevic D (Reprint); Polenakovic B (Reprint); Golubovic M

Author Address: Clinical Center, Inst. Clin. Biochemistry, Skopje, Macedonia,

macedonia** macedonia

Journal: Clinical Chemistry and Laboratory Medicine 37 (SPEC. SUPPL.): p S469

June, 1999 1999 **Medium:** print

Conference/Meeting: IFC-WorldLab, International Federation of Clinical and Laboratory Medicine (17th International and 13th European Congress of Clinical Chemistry and Laboratory Medicine, 1st International Congress of Clinical Molecular Biology, 31st National Congress of the Italian Society of Clinical Biochemistry and

Clinical Molecular Biology) Florence, Italy June 6-11, 1999; 19990606 **Sponsor:** International Federation of Clinical and Laboratory Medicine Italian Society of Clinical Biochemistry and Clinical Molecular Biology

ISSN: 1434-6621

Document Type: Meeting; Meeting Abstract; Meeting Poster

Record Type: Citation Language: English

Registry Numbers: 9015-82-1: angiotensin-converting enzyme

DESCRIPTORS:

Major Concepts: Clinical Chemistry--Allied Medical Sciences; Enzymology--Biochemistry and Molecular Biophysics; Hematology--Human Medicine, Medical

Sciences; Ophthalmology--Human Medicine, Medical Sciences

Biosystematic Names: Hominidae--Primates, Mammalia, Vertebrata, Chordata,

Animalia

Organisms: human (Hominidae)--patient

Common Taxonomic Terms: Animals; Chordates; Humans; Mammals; Primates;

Vertebrates

Diseases: ocular sarcoidosis--blood and lymphatic disease, eye disease, immune system

disease

Chemicals & Biochemicals: angiotensin-converting enzyme--disease marker, serum

Methods & Equipment: thoracal radiography

Miscellaneous Terms: Concept Codes: intraocular inflammation; Meeting Abstract;

Meeting Poster; Meeting Abstract; Meeting Poster

Concept Codes:

10802 Enzymes - General and comparative studies: coenzymes

10060 Biochemistry studies - General

12504 Pathology - Diagnostic

20001 Sense organs - General and methods

34502 Immunology - General and methods

15001 Blood - General and methods

00520 General biology - Symposia, transactions and proceedings

Biosystematic Codes:

86215 Hominidae

Dialog eLink:

7/5/25 (Item 9 from file: 5)

DIALOG(R)File 5: Biosis Previews(R)

(c) 2010 The Thomson Corporation. All rights reserved.

10595207 **Biosis No.:** 199141107833

CAPTOPRIL IN THE TREATMENT OF ACUTE MYOCARDIAL INFARCTION OPEN LABEL RANDOMIZED CONTROLLED STUDY OF CLINICAL ECHOCARDIOGRAPHIC AND BIOCHEMICAL PARAMETERS

Author: VASILJEVIC Z (Reprint); OSTOJIC M; RISTIC M; GOLUBOVIC M; RADOSAVLJEVIC M; JARKIN M; NIKOLIC J; NIKITOVIC S; STANOKOV S

Author Address: UNIV INST CARDIOVASCULAR DIS, BELGRADE,

YUGOSL**YUGOSLAVIA

Journal: European Heart Journal 12 (ABSTR. SUPPL): p 289 1991

Conference/Meeting: ABSTRACTS SELECTED FOR PRESENTATION AT THE

XIIITH CONGRESS OF THE EUROPEAN SOCIETY OF CARDIOLOGY, AMSTERDAM, NETHERLANDS, AUGUST 18-22, 1991. EUR HEART J.

ISSN: 0195-668X

Document Type: Meeting **Record Type:** Citation **Language:** ENGLISH

Registry Numbers: 62571-86-2: CAPTOPRIL

Descriptors: ABSTRACT HUMAN CARDIOVASCULAR-DRUG

DESCRIPTORS:

Major Concepts: Cardiovascular Medicine--Human Medicine, Medical Sciences;

Morphology; Pharmacology; Radiology--Medical Sciences

Biosystematic Names: Hominidae--Primates, Mammalia, Vertebrata, Chordata,

Animalia

Common Taxonomic Terms: Animals; Chordates; Humans; Mammals; Primates;

Vertebrates

Chemicals & Biochemicals: CAPTOPRIL

Concept Codes:

00520 General biology - Symposia, transactions and proceedings

06504 Radiation biology - Radiation and isotope techniques

10060 Biochemistry studies - General

10504 Biophysics - Methods and techniques

11106 Anatomy and Histology - Radiologic anatomy

12512 Pathology - Therapy

14501 Cardiovascular system - General and methods

14506 Cardiovascular system - Heart pathology

14508 Cardiovascular system - Blood vessel pathology

22005 Pharmacology - Clinical pharmacology

22010 Pharmacology - Cardiovascular system

Biosystematic Codes:

86215 Hominidae

Dialog eLink:

7/5/26 (Item 10 from file: 5)

DIALOG(R)File 5: Biosis Previews(R)

(c) 2010 The Thomson Corporation. All rights reserved.

08550095 **Biosis No.:** 198783028986

GLUCOSE CONTENT IN AQUEOUS HUMOR OF THE PATIENTS WITH DIFFERENT EYE DISORDERS

Author: GOLUBOVIC M (Reprint); JOVANOVIC S

Author Address: OPHTHALMOL CLIN, FAC MED, UNIV BELGRADE, 11000

BELGRADE, YOGOSLAVIA

Journal: Acta Biologiae et Medicinae Experimentalis 10 (2): p 19-22 1986

ISSN: 0350-5901

Document Type: Article **Record Type:** Abstract **Language:** ENGLISH

Abstract: Using the GOD-Perid method (Boehringer Manheim GmbH, West Germany), glucose in 69 blood sera and 69 aqueous humour samples of the patients with different eye disorders was determined. The glucose content of the aqueous humour of the group

with senile cataract was 2.84 .+-. 0.49 mmol/l corresponding to the value found in the patients with no cataract. The steady-state ratio (r) of aqueous humour glucose was 0.58 .+-. 0.08%. The glucose content of the aqueous humour of traumatic cataract was about the same as in cataractous eyes. The steady-state ratio of aqueous humour glucose was elevated in diabetic hyperglycemia. The glucose content in the aqueous humour of the patients suffering from uveitis was rather low. In contrast, the higher aqueous humour glucose values were obtained in the eyes with endophthalmitis.

Registry Numbers: 50-99-7Q: GLUCOSE; 58367-01-4Q: GLUCOSE **Descriptors:** CATARACT DIABETIC HYPERGLYCEMIA UVEITIS

ENDOPHTHALMITIS **DESCRIPTORS:**

Major Concepts: Clinical Chemistry--Allied Medical Sciences; Metabolism;

Physiology; Sense Organs--Sensory Reception

Biosystematic Names: Hominidae--Primates, Mammalia, Vertebrata, Chordata,

Animalia

Common Taxonomic Terms: Animals; Chordates; Humans; Mammals; Primates;

Vertebrates

Chemicals & Biochemicals: GLUCOSE; GLUCOSE

Concept Codes:

10006 Clinical biochemistry - General methods and applications

10068 Biochemistry studies - Carbohydrates

12508 Pathology - Inflammation and inflammatory disease

13004 Metabolism - Carbohydrates

13020 Metabolism - Metabolic disorders

15010 Blood - Other body fluids

17008 Endocrine - Pancreas

20001 Sense organs - General and methods

20006 Sense organs - Pathology

Biosystematic Codes:

86215 Hominidae

Dialog eLink:

7/5/27 (Item 11 from file: 5)

DIALOG(R)File 5: Biosis Previews(R)

(c) 2010 The Thomson Corporation. All rights reserved.

08545498 **Biosis No.:** 198783024389

DETERMINATION OF CIRCULATING IMMUNE COMPLEXES IN AQUEOUS HUMOR OF PATIENTS SUFFERING FROM SENILE CATARACT

Author: GOLUBOVIC M (Reprint); STANOJEVIC-PAVLOVIC A; JOVANOVIC S;

MILETIC V

Author Address: OPHTHALMOL CLINIC, MED FAC, UNIV BELGRADE, 11 000

BELGRADE, YUGOSL** YUGOSLAVIA

Journal: Acta Biologiae et Medicinae Experimentalis 11 (1): p 55-57 1986

ISSN: 0350-5901

Document Type: Article **Record Type:** Abstract **Language:** ENGLISH

Abstract: Immune complexes in aqueous humor of the patients suffering from different ocular diseases were determined. Aqueous humor of the patients with senile cataract served as the control. Rheumatoid factor was not found in 43 of the control samples, while it was inhibited in 11% of the cases. An inhibition of C1q was observed in 9% of the samples. Analyses of aqueous humor of the persons suffering from uveitis revealed the rheumatoid factor in 10% of the samples. An inhibition of both C1q and rheumatoid factor was observed in 5% and 15% of the samples, respectively, suggesting that they might play a role in the etiology of uveitis. Autoimmune complexes were observed at a higher percentage in the aqueous humor of the patients suffering from facoantigen uveitis.

Descriptors: RHEUMATOID FACTOR OCULAR DISEASE UVEITIS **DESCRIPTORS:**

Major Concepts: Clinical Chemistry--Allied Medical Sciences; Clinical Endocrinology--Human Medicine, Medical Sciences; Metabolism; Sense Organs--Sensory Reception Biosystematic Names: Hominidae--Primates, Mammalia, Vertebrata, Chordata, Animalia

Common Taxonomic Terms: Animals; Chordates; Humans; Mammals; Primates; Vertebrates

Concept Codes:

10006 Clinical biochemistry - General methods and applications

10064 Biochemistry studies - Proteins, peptides and amino acids

10068 Biochemistry studies - Carbohydrates

12508 Pathology - Inflammation and inflammatory disease

13012 Metabolism - Proteins, peptides and amino acids

20006 Sense organs - Pathology

34508 Immunology - Immunopathology, tissue immunology

Biosystematic Codes:

86215 Hominidae

Dialog eLink:

7/5/28 (Item 12 from file: 5)

DIALOG(R)File 5: Biosis Previews(R)

(c) 2010 The Thomson Corporation. All rights reserved.

08446448 **Biosis No.:** 198733053053

CHANGES IN ENERGY POTENTIAL OF LENSES OF RATS EXPOSED TO COPPER POISONING

Author: POSTIC-GRUJIN A (Reprint); SAVIC S; GOLUBOVIC M

Author Address: BELGRADE

Journal: Ophthalmic Research 19 (1): p 38 1987

Conference/Meeting: 27TH MEETING OF THE ASSOCIATION FOR EYE

RESEARCH, OXFORD, ENGLAND, UK, SEPTEMBER 14-18, 1986. OPHTHALMIC

RES.

ISSN: 0030-3747

Document Type: Meeting **Record Type:** Citation **Language:** ENGLISH

Registry Numbers: 7440-50-8: COPPER; 56-65-5Q: ATP; 42530-29-0Q: ATP; 94587-45-8Q: ATP; 111839-44-2Q: ATP; 58-64-0Q: ADP; 4792-83-0Q: ADP; 7722-76-1Q: ADP; 19429-39-1Q: ADP; 175832-20-9Q: ADP; 61-19-8Q: AMP; 124-68-5Q: AMP; 2307-00-8Q: AMP; 9049-84-7Q: AMP; 12704-86-8Q: AMP; 76168-80-4Q: AMP;

151820-25-6Q: AMP; 177933-73-2Q: AMP **Descriptors:** ABSTRACT ATP ADP AMP

DESCRIPTORS:

Major Concepts: Metabolism; Pathology; Sense Organs--Sensory Reception;

Toxicology

Biosystematic Names: Muridae--Rodentia, Mammalia, Vertebrata, Chordata, Animalia Common Taxonomic Terms: Animals; Chordates; Mammals; Nonhuman Vertebrates; Nonhuman Mammals; Rodents; Vertebrates

Chemicals & Biochemicals: COPPER; ATP; ATP; ATP; ATP; ADP; ADP; ADP;

ADP; ADP; AMP; AMP; AMP; AMP; AMP; AMP; AMP

Concept Codes:

00520 General biology - Symposia, transactions and proceedings

10062 Biochemistry studies - Nucleic acids, purines and pyrimidines

10069 Biochemistry studies - Minerals

12504 Pathology - Diagnostic

13003 Metabolism - Energy and respiratory metabolism

20001 Sense organs - General and methods

20006 Sense organs - Pathology

22506 Toxicology - Environment and industry

Biosystematic Codes:

86375 Muridae

Dialog eLink:

7/5/29 (Item 13 from file: 5)

DIALOG(R)File 5: Biosis Previews(R)

(c) 2010 The Thomson Corporation. All rights reserved.

08446443 **Biosis No.:** 198733053048

ACTIVITY OF SEVERAL ENZYMES INVOLVED IN CARBOHYDRATE METABOLISM IN THE LENS WITH PATIENTS WITH CATARACTS OF DIFFERENTIAL ETIOLOGY

Author: GOLUBOVIC M (Reprint); SAVIC S; JOVANOVIC S; MAJKIC-SINGH N;

SPASIC S; POSTIC-GRUJIN A **Author Address:** BELGRADE

Journal: Ophthalmic Research 19 (1): p 37 1987

Conference/Meeting: 27TH MEETING OF THE ASSOCIATION FOR EYE

RESEARCH, OXFORD, ENGLAND, UK, SEPTEMBER 14-18, 1986. OPHTHALMIC

RES.

ISSN: 0030-3747

Document Type: Meeting **Record Type:** Citation **Language:** ENGLISH

Registry Numbers: 9001-40-5: GLUCOSE-6-PHOSPHATE DEHYDROGENASE;

9001-80-3Q: PHOSPHOFRUCTOKINASE; 37278-03-8Q:

PHOSPHOFRUCTOKINASE; 55326-40-4Q: PHOSPHOFRUCTOKINASE; 78689-77-

7Q: PHOSPHOFRUCTOKINASE; 9028-31-3: ALDOSE REDUCTASE

Descriptors: ABSTRACT HUMAN GLUCOSE-6-PHOSPHATE DEHYDROGENASE

PHOSPHOFRUCTOKINASE ALDOSE REDUCTASE

DESCRIPTORS:

Major Concepts: Clinical Chemistry--Allied Medical Sciences; Enzymology--

Biochemistry and Molecular Biophysics; Metabolism; Pathology; Sense Organs--Sensory

Reception

Biosystematic Names: Hominidae--Primates, Mammalia, Vertebrata, Chordata,

Animalia

Common Taxonomic Terms: Animals; Chordates; Humans; Mammals; Primates;

Vertebrates

Chemicals & Biochemicals: GLUCOSE-6-PHOSPHATE DEHYDROGENASE;

PHOSPHOFRUCTOKINASE; PHOSPHOFRUCTOKINASE;

PHOSPHOFRUCTOKINASE; PHOSPHOFRUCTOKINASE; ALDOSE REDUCTASE

Concept Codes:

00520 General biology - Symposia, transactions and proceedings

10006 Clinical biochemistry - General methods and applications

10064 Biochemistry studies - Proteins, peptides and amino acids

10068 Biochemistry studies - Carbohydrates

10808 Enzymes - Physiological studies

12504 Pathology - Diagnostic

13004 Metabolism - Carbohydrates

20006 Sense organs - Pathology

Biosystematic Codes:

86215 Hominidae

Dialog eLink:

7/5/30 (Item 1 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

20274620 Genuine Article#: 554HN Number of References: 32

Title: Correlation between disease progression and histopathologic criterions of the lip squamous cell carcinoma

Author: Golubovic M (REPRINT); Asanin B; Jelovac D; Petrovic M; Antunovic M Corporate Source: Ctr Patol & Sudsku Med,Klin Ctr Crne Gore, Fak Med,Ljubljanska BB/Podgorica//Montenegro/ (REPRINT); Ctr Patol & Sudsku Med,Klin Ctr Crne Gore, Fak Med,Podgorica//Montenegro/; Klin Maksilofacijalnu Hirurgiju,Stomatolski Fak,Belgrade//Serbia/

Journal: VOJNOSANITETSKI PREGLED, 2010, V 67, N1 (JAN), P 19-24

ISSN: 0042-8450 **Publication Date:** 20100100

Publisher: MILITARY MEDICAL ACAD-INI, CRNOTRAVSKA 17, PO BOX 33-35,

BELGRADE, 11040, SERBIA

Language: Serbian Document Type: ARTICLE

Geographic Location: Montenegro; Serbia

Journal Subject Category: MEDICINE, GENERAL & INTERNAL

Abstract: Background/Aim. The most common malignancy of the lip is squamous cell carcinoma (SCC) In our population, according to epidemiological data, almost a half of all (45%) SCC of oral mucous tissue spreads over the lower and upper lip. The iam of this study was to estimate prognostic importance of histopathologic characteristics histologic grade, nuclear grade and tumor size in relation to the appearance of lymph node metastases and relapse in SCC of the lip Methods In the retrospective-prospective study 70 cases of lower and upper lip SCC were analyzed. They were diagnosed from 2002 to 2006 in the Clinic of Maxillofacial Surgery, Clinical Center of Montenegro The data about localization of the carcinomas, histopathologic characteristics and lymph node status were taken from medical files of the patients. The patients were followed up in a 3year period and the disease relapse or/and metastatic disease appearance were registereds. Results. There was statistically significant difference in tumor size among the patients with and without disease relapse (p = 0.027) Logistic regression analysis showed that the tumor size is a statistically significant factor (R = 0.186, p = 0.011) for the appearance of regional lymph node metastases Relative risk [exp (B)] for the appearance of regional lymph node metastases in relation to tumor size was 2.807 Conclusion Histologic and nuclear grade of lip SCC are not prognostic factors for the appearance of the disease relapse and regional lymph node metastasis. Tumor size is a predictive factor of the relapse appearance, as well as for lymph node metastases appearance In clinical practice, tumor size is a factor that classifies patients with lip SCC into the groups of higher and smaller risk of relapse appearance and for lymph node metastases appearance. Our results suggest that, risk for lymph node metastases appearance increases 2.8 times with increasing of the tumor size over 2 cm in diameter.

Descriptors: SCIAuthor Keywords: lip neoplasms; neoplasms squamous cell; neoplasm staging; disease progression; neoplasm metastasis; risk factors; histological techniques **Identifiers:** KeyWord Plus(R): ORAL-CAVITY; NODE METASTASES; CANCER; NECK; P53; PARAMETERS; EXPERIENCE; TUMORS; MOUTH; FLOOR Cited References:

AHOMADEGBE JC, 1995, V10, P1217, ONCOGENE

ANDISHEHTADBIR A, 2008, V19, P1699, J CRANIOFAC SURG ANTUNES JLF, 2001, V37, P345, ORAL ONCOL ARIYOSHI Y, 2008, V13, P220, INT J CLIN ONCOL BUSQUETS JM, 2003, V22, P259, PR HLTH SCI J CHANG FJ, 1993, V88, P174, AM J GASTROENTEROL DURAZZO MD, 2005, V60, P293, CLINICS EFFIOM OA, 2008, V66, P1595, J ORAL MAXIL SURG FORASTIERE AA, 1995, V7, P227, CURR OPIN ONCOL FUNK GF, 2002, V24, P165, HEAD NECK-J SCI SPEC GERVASIO OL, 2001, V12, P57, BRAZ DENT J HOMMA A, 1999, V5, P801, CLIN CANCER RES IBRAHIM SO, 1999, V35, P302, ORAL ONCOL JATIN PS, P102, ATLAS CLIN ONCOLOGY KOZOMORA R, 2003, P1, THESIS MILITARY MED KROLLS SO, 1976, V92, P571, J AM DENT ASSOC LARREILLE JP, 1998, V34, P84, ORAL ONCOL LUNAORTIZ K, 2004, V40, P992, ORAL ONCOL MARTINEZGIMENO C, 2005, V27, P320, HEAD NECK-J SCI SPEC NASON RW, 1990, V14, P606, WORLD J SURG PETROVIC M, 2008, V12, P34, BALKAN J STOMATOLOGY RIVERA II, 2008, V21, P175, ACTA ODONTOL LAUNOAM SHAH JP, 1976, V132, P504, AM J SURG SOBIN LH, 1997, P17, TNM CLASSIFICATION M SOBIN LH, 2002, TNM CLASSIFICATION M SPARANO A, 2004, V131, P472, OTOLARYNG HEAD NECK STOLL C. 1998, V433, P427, VIRCHOWS ARCH SUZUKI M, 2007, V559, P129, ACTA OTO-LARYNGOL UMEDA M, 1992, V14, P263, HEAD NECK-J SCI SPEC VUKADINOVIC M, 2007, V65, P675, J ORAL MAXIL SURG WALLWORK BD, 2007, V77, P761, ANZ J SURG WORRALL SF, 1995, V33, P195, BRIT J ORAL MAX SURG

Dialog eLink:

7/5/31 (Item 2 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

20160523 Genuine Article#: 547YS Number of References: 12

Title: Laryngeal adenoid cystic carcinoma Author: Zvrko E (REPRINT); Golubovic M Author Email Address: elvirz@t-com.me

Corporate Source: Klin ORL I MFH,Ljubljanska Bb/Podgorica 81000//Montenegro/(REPRINT); Clin Ctr Montenegro,Ctr Pathol,Podgorica//Montenegro/; Clin Ctr Montenegro,Clin Otorhinolaryngol & Maxillofacial Surg,Podgorica//Montenegro/

Journal: ACTA OTORHINOLARYNGOLOGICA ITALICA , 2009 , V 29 , N5 (OCT)

, P 279-282

ISSN: 0392-100X **Publication Date:** 20091000

Publisher: PACINI EDITORE, VIA DELLA GHERARDESCA-ZONA

INDUSTRIALE OSPEDALETTO, 56121 PISA, ITALY

Language: English Document Type: ARTICLE

Geographic Location: Montenegro

Journal Subject Category: OTORHINOLARYNGOLOGY

Abstract: Adenoid cystic carcinomas are malignant tumours and occur in the major and the minor salivary glands. Laryngeal adenoid cystic carcinomas are rare and account for less than 1% of all malignant tumours in the larynx. Adenoid cystic carcinoma is characterised by slow progression, multiple recurrences and late distant metastasis. The aetiology of adenoid cystic carcinoma remains unknown. They usually originate in the supraglottic or subglottic area. Wide-margin surgery alone or in combination with post-operative radiotherapy is the best tumour management. In this article, the case of laryngeal adenoid cystic carcinoma is described in a 55-year-old male patient who presented with a 3-month history of prelaryngeal pain. The patient underwent total laryngectomy and post-operative radiotherapy. For patients with laryngeal adenoid cystic carcinomas, regular and long-term follow-up is mandatory, in order to detect relapses and metastases.

Descriptors: SCIAuthor Keywords: Larynx; Malignant tumours; Adenoid cystic

carcinoma; Laryngectomy

Identifiers: KeyWord Plus(R): TUMORS

Cited References:

ALAVI S, 1999, V108, P485, ANN OTO RHINOL LARYN BATSAKIS JG, 1992, V101, P1024, ANN OTO RHINOL LARYN BROWNE JD, 1997, V30, P215, OTOLARYNG CLIN N AM DEKERVILER E, 1995, V16, P1375, AM J NEURORADIOL DEXEMBLE P, 2003, V120, P244, ANN OTOLARYNGOL CHIR FERLITO A, 1990, V99, P277, ANN OTO RHINOL LARYN GANLY I, 2006, V132, P767, ARCH OTOLARYNGOL OLOFSSON J, 1977, V40, P1307, CANCER SPIRO RH, 1973, V31, P117, CANCER TINCANI AJ, 2006, V124, P26, SAO PAULO MED J VEIVERS D, 2001, V115, P388, J LARYNGOL OTOL WANG MC, 2006, V69, P322, J CHIN MED ASS

Dialog eLink:

7/5/32 (Item 3 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

19771593 Genuine Article#: 503BT Number of References: 8

Title: Rare Type of Quadricuspid Aortic Valve Requiring Surgical Replacement

Author: Susak S; Torbica V; Velicki L (REPRINT); Golubovic M

Author Email Address: velar@sbb.rs

Corporate Source: Inst Cardiovasc Dis Vojvodina, Cardiovasc Surg Clin, Pecka 14/Novi

Sad 21000//Serbia/ (REPRINT); Inst Cardiovasc Dis Vojvodina, Cardiovasc Surg

Clin, Novi Sad 21000//Serbia/

Journal: THORACIC AND CARDIOVASCULAR SURGEON, 2009, V 57, N6 (SEP

), P 364-366

ISSN: 0171-6425 **Publication Date:** 20090900 **Digital Object Identifier:** 10.1055/s-0029-1185563

Publisher: GEORG THIEME VERLAG KG, RUDIGERSTR 14, D-70469

STUTTGART, GERMANY

Language: English Document Type: ARTICLE

Geographic Location: Serbia

Journal Subject Category: CARDIAC & CARDIOVASCULAR SYSTEMS;

RESPIRATORY SYSTEM; SURGERY

Abstract: Quadricuspid aortic valve, a rare congenital anomaly, is often related to severe aortic regurgitation and has a significant morbidity. The first described case was reported in 1862. Quadricuspid aortic valve is, in most cases, an isolated malformation, but it can be associated with other concomitant anomalies. We present here the case of a quadricuspid aortic valve discovered by intraoperative transesophageal echocardiography and successfully replaced with a mechanical aortic valve.

Descriptors: SCIAuthor Keywords: Heart valve surgery; heart disease; cardiovascular surgery

Cited References:

ATTARAN RR, 2009, V18, P49, CARDIOVASC PATHOL BASAVARAJAIAH S, 2008, V94, P866, HEART FELDMAN BJ, 1990, V65, P937, AM J CARDIOL FORMICA F, 2004, V3, P672, INTERACT CARDIOVASC HOLM H, 2004, V31, P450, TEX HEART I J HURWITZ LE, 1973, V31, P623, AM J CARDIOL TUTAREL O, 2004, V13, P534, J HEART VALVE DIS YOTSUMOTO G, 2003, V9, P134, ANN THORAC CARDIOVAS

Dialog eLink:

7/5/33 (Item 4 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

19557030 Genuine Article#: 474TT Number of References: 0

Title: Oncocytoma of the lung. Case report

Author: Nenezic T; Savjak D; Vuckovic L; Vukmirovic F; Golubovic M

Corporate Source: Ctr Clin, Podgorica//Serbia/

Journal: VIRCHOWS ARCHIV, 2009, V 455, 1 (AUG), P 355-356

ISSN: 0945-6317 **Publication Date:** 20090800

Publisher: SPRINGER, 233 SPRING ST, NEW YORK, NY 10013 USA

Language: English **Document Type:** MEETING ABSTRACT

Geographic Location: Serbia

Journal Subject Category: PATHOLOGY

Dialog eLink:

7/5/34 (Item 5 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

19557029 Genuine Article#: 474TT Number of References: 0

Title: EGFR expression in lung squamous cell carcinoma and correlation with

prognosis

Author: Vuckovic L; Latinovic LT; Eri Z; Savjak D; Nenezic T; Vukmirovic F;

Golubovic M

Corporate Source: Ctr Clin, Podgorica//Serbia/

Journal: VIRCHOWS ARCHIV, 2009, V 455, 1 (AUG), P 355-355

ISSN: 0945-6317 **Publication Date:** 20090800

Publisher: SPRINGER, 233 SPRING ST, NEW YORK, NY 10013 USA

Language: English Document Type: MEETING ABSTRACT

Geographic Location: Serbia

Journal Subject Category: PATHOLOGY

Dialog eLink:

7/5/35 (Item 6 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

18435901 Genuine Article#: 363NC Number of References: 34

Title: Three-dimensional laminar slip-flow and heat transfer in a rectangular microchannel with constant wall temperature

Author: Hettiarachchi HDM; Golubovic M; Worek WM (REPRINT); Minkowycz WJ

Corporate Source: Univ Illinois, Dept Mech & Ind Engn, 842 W Taylor St/Chicago//IL/60607 (REPRINT); Univ Illinois, Dept Mech & Ind

Engn, Chicago // IL/60607

Journal: INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, 2008,

V 51, N21-22 (OCT), P 5088-5096

ISSN: 0017-9310 **Publication Date:** 20081000

Publisher: PERGAMON-ELSEVIER SCIENCE LTD , THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Language: English Document Type: ARTICLE

Geographic Location: USA

Journal Subject Category: THERMODYNAMICS; ENGINEERING, MECHANICAL; MECHANICS

Abstract: Three-dimensional laminar slip-flow and heat transfer in rectangular microchannels having constant temperature walls are studied numerically using the finitevolume method for thermally and simultaneously developing flows. The Navier-Stokes and energy equations are solved with velocity slip and temperature jump at the wall. A modified convection-diffusion coefficient at the wall-fluid interface is defined to incorporate the temperature-jump boundary condition. Validity of the numerical simulation procedure is established and the effect of rarefaction on hydrodynamicaly developing flow field, pressure gradient and entrance length is analyzed. A correlation for the fully developed friction factor is presented as a function of Knudsen number (Kn) and aspect ratio (alpha). The influence of rarefaction on the Nusselt (Nu) number is investigated for thermally and simultaneously developing flows. The effect of velocity slip is found to increase the Nu number, while the temperature-jump tends to decrease it, and the combined effect could result in an increase or a decrease in the Nu number. In the fully developed region, there could be high as 15% increase or low as 50% decrease in Nu number is plausible for the range of parameters considered in this work. (C) 2008 Elsevier Ltd. All rights reserved.

Descriptors: SCIAuthor Keywords: Microchannel; Slip-flow; Heat transfer; Knudsen number; Rarefaction; Simultaneously developing

Identifiers: KeyWord Plus(R): LONG MICROCHANNELS; GAS-FLOW;

CONVECTION: CHANNELS: MICRO

Cited References:

AMEEL TA, 1997, V1, P303, MICROSCALE THERM ENG ARAKI T, 2002, V6, P117, MICROSCALE THERM ENG ARKILIC EB, 1994, V197, P57, ASME FED ARKILIC EB, 1997, V6, P167, J MICROELECTROMECH S AYDIN O, 2006, V3, P628, J THERMOPHYS HEAT TR BARKHORDARI M, 2007, V5, P1027, INT J HEAT FLUID FL BARRON RF, 1997, V40, P1817, INT J HEAT MASS TRAN BESKOK A, 1999, V3, P43, MICROSCALE THERM ENG BESKOK A, 1992, V40, P355, MICROMECHANICAL SYST BISWAL L, 2007, V50, P1248, INT J HEAT MASS TRAN CHOI KC, 2003, V1, P71, REPROD BIOL ENDOCRIN DONGARI N. 2007, V50, P3411, INT J HEAT MASS TRAN DUAN ZP, 2007, V11, P1104, INT J THERM SCI EBERT WA, 1965, V87, P1018, T ASME ECKERT EGR, 1972, P467, ANAL HEAT MASS TRANS GHODOOSSI L, 2005, V44, P513, INT J THERM SCI HADJICONSTANTIN.NG, 2002, V124, P56, J HEAT TRANSF HARLEY JC, 1995, V284, P257, J FLUID MECH HSIEH SS, 2004, V47, P3877, INT J HEAT MASS TRAN KARNIADAKIS G, 2005, MICROFLOWS NANOFLOWS KUDDUSI L, 2007, V4, P777, INT J HEAT FLUID FL KUDDUSI L, 2007, V10, P998, INT J THERM SCI LARRODE FE, 2000, V43, P2669, INT J HEAT MASS TRAN

MORINI GL, 1998, V2, P273, MICROSCALE THERM ENG PATANKAR SV, 1980, NUMERICAL HEAT TRANS RENKSIZBULUT M, 2006, V45, P870, INT J THERM SCI RIJ JV, 2007, V11, P1095, INT J THERM SCI SHAH RK, 1978, ADV HEAT TRANSFER S1 SUN W, 2007, V50, P3411, INT J THERM SCI TANG GH, 2007, V11, P2282, INT J HEAT MASS TRAN WIBULSWAS P, 1966, THESIS LONDON U LOND YU SP, 2001, V44, P4225, INT J HEAT MASS TRAN YU S, 2000, V28, P905, INT COMMUN HEAT MASS YU SP, 2002, V124, P346, J HEAT TRANS-T ASME

Dialog cLink:

7/5/36 (Item 7 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

17107818 Genuine Article#: 2290G Number of References: 37

Title: A method for lipase co-precipitation in a biodegradable protein matrix Author: Golubovic M; van Hateren SH; Ottens M (REPRINT); Witkamp GJ; van der Wielen LAM

Corporate Source: Delft Univ Technol, Dept Biotechnol, Julianalaan 67/NL-2628 BC Delft//Netherlands/ (REPRINT); Delft Univ Technol, Dept Biotechnol, NL-2628 BC Delft//Netherlands/; Delft Univ Technol, Lab Proc Equipment, Delft//Netherlands/

Journal: BIOTECHNOLOGY AND BIOENGINEERING, 2007, V 98, N6 (DEC 15), P 1209-1218

ISSN: 0006-3592 **Publication Date:** 20071215

Publisher: JOHN WILEY & SONS INC, 111 RIVER ST, HOBOKEN, NJ 07030 USA

Language: English Document Type: ARTICLE

Geographic Location: Netherlands

Journal Subject Category: BIOTECHNOLOGY & APPLIED MICROBIOLOGY **Abstract:** This article presents a novel method for immobilization of active ingredients. The method is based on CO2 aided active ingredient co-precipitation with glycinm, a biodegradable protein matrix from edible soybean protein. Glycinin precipitates abundantly under isoelectric conditions and serves as the matrix within which the active substance is trapped during the precipitation process. The enzyme lipase from Candida rugosa was successfully co-precipitated into the protein pellet to prove the principle. It was shown that the lipase within the co-precipitate retained lipase and esterase activity under different PH conditions. In some cases the activity was even higher than the activity of crude lipase, possibly due to the protective role of the matrix protein. Due to the retained lipase, activity and food-grade quality of the binary precipitate, it has potential of being used in the food or pharmaceutical industry. Additional quality of the binary precipitate is the potentially significantly reduced downstream processing due to the fact that no organic solvents or precipitants were, used in the precipitation process.

Descriptors: SCIAuthor Keywords: protein-protein co-recipitation; glycinin; lipase; isoelectric precipitation; protein-protein interaction; immobilization; binary precipitate **Identifiers:** KeyWord Plus(R): DELIVERY-SYSTEMS; CARBON-DIOXIDE; ISOELECTRIC PRECIPITATION; CANDIDA-RUGOSA; BIOTECHNOLOGY; FRACTIONATION; PURIFICATION; ENCAPSULATION; GLYCININ; ENZYMES Cited References:

ALBERGHINA L, 1997, P260, CLONING SEQUENCING E CAO LQ, 2005, V9, P217, CURR OPIN CHEM BIOL CHAN MYY, 1986, V28, P387, BIOTECHNOL BIOENG CONTI S, 2000, V1, P313, CURR PHARM BIOTECHNO DESAI KGH, 2005, V23, P1361, DRY TECHNOL ELANEED A, 2004, V94, P1, J CONTROL RELEASE FELNEROVA D, 2004, V15, P518, CURR OPIN BIOTECH FENG B, 2005, P2377, INFLUENCE CALCIUM TI FROMENT GF, 1990, CHEM REACTOR ANAL DE GOLUBOVIC M, 2005, V53, P5265, J AGR FOOD CHEM GOLUBOVIC M, 2005, METHOD PREPARING PRO HERNAIZ MJ, 1994, V44, P213, APPL BIOCHEM BIOTECH HOFLAND GW, 2000, V743, P357, J CHROMATOGR B HOFLAND GW, 1999, V38, P4919, IND ENG CHEM RES HOWELL NK, 1995, V30, P813, INT J FOOD SCI TECH JAEGER KE, 2002, V13, P390, CURR OPIN BIOTECH KAWAMOTO H, 1996, V41, P1427, PHYTOCHEMISTRY KOSARAJU SL, 2005, V45, P251, CRIT REV FOOD SCI LALLES JP, 1999, V47, P2797, J AGR FOOD CHEM LIU K, 1997, SOYBEANS CHEM TECHNO LOPEZSERRANO P. 2002, V24, P1379, BIOTECHNOL LETT LOTTI M, 1994, V7, P531, PROTEIN ENG MIGNEAULT I, 2004, V37, P790, BIOTECHNIQUES PANDEY A, 1999, V29, P119, BIOTECHNOL APPL BI 2 PIERRE AC. 2004. V22. P145. BIOCATAL BIOTRANSFOR PRZYBYCIEN TM, 1998, V9, P164, CURR OPIN BIOTECH RANADE VV, 1991, V31, P2, J CLIN PHARMACOL RUA ML, 1993, V1156, P181, BIOCHIM BIOPHYS ACTA SAKAGUCHI K, 2005, V67, P306, APPL MICROBIOL BIOT SANCHEZMONTERO JM, 1991, V1078, P345, BIOCHIM BIOPHYS ACTA SCHOEVAART R, 2004, V87, P754, BIOTECHNOL BIOENG SHARMA S, 2000, V9, P93, BIOSEPARATION SUKHISHVILI SA, 2005, V10, P37, CURR OPIN COLLOID IN TESKE CA, 2004, V219, P139, FLUID PHASE EQUILIBR THANH VH, 1976, V24, P1117, J AGR FOOD CHEM THIERING R, 2001, V73, P1, BIOTECHNOL BIOENG THIERING R, 2001, V17, P513, BIOTECHNOL PROGR

Dialog eLink:

7/5/37 (Item 8 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

16886310 Genuine Article#: 210KH Number of References: 0

Title: Prognostic importance of vascular endothelial growth factor expression in

gastric cancer

Author: Vukmirovic F; Sayjak D; Eri Z; Usaj S; Klem I; Golubovic M; Vuckovic L Corporate Source: Clin Ctr Montenegro, Dept Pathol, Sremska Kamenica//Serbia/; Inst Lung Dis, Dept Pathol, Sremska Kamenica//Serbia/; Inst Oncol, Dept Pathol, Sremska

Kamenica//Serbia/

Journal: VIRCHOWS ARCHIV, 2007, V 451, N2 (AUG), P 231-232

ISSN: 0945-6317 **Publication Date:** 20070800

Publisher: SPRINGER, 233 SPRING STREET, NEW YORK, NY 10013 USA

Language: English Document Type: MEETING ABSTRACT

Geographic Location: Serbia

Journal Subject Category: PATHOLOGY

Dialog eLink:

7/5/38 (Item 9 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

16886309 Genuine Article#: 210KH Number of References: 0

Title: Microvessel density is an independent prognostic factor of gastric cancer Author: Vukmirovic F; Savjak D; Usaj S; Eri Z; Klem I; Vuckovic L; Golubovic M Corporate Source: Inst Oncol,Dept Pathol,Sremska Kamenica//Serbia/; Inst Lung

Dis, Dept Pathol, Sremska Kamenica//Serbia/

Journal: VIRCHOWS ARCHIV, 2007, V 451, N2 (AUG), P 231-231

ISSN: 0945-6317 **Publication Date:** 20070800

Publisher: SPRINGER, 233 SPRING STREET, NEW YORK, NY 10013 USA

Language: English Document Type: MEETING ABSTRACT

Geographic Location: Serbia

Journal Subject Category: PATHOLOGY

Dialog eLink:

7/5/39 (Item 10 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

16866109 Genuine Article#: 206HT Number of References: 15

Title: The performance of the kalina cycle system 11(KCS-11) with low-temperature heat sources

Author: Hettiarachchi HDM; Golubovic M; Worek WM (REPRINT); Ikegami Y

Corporate Source: Univ Illinois, Dept Mech & Ind Engn, 842 W Taylor St/Chicago//IL/60607 (REPRINT); Univ Illinois, Dept Mech & Ind

Engn, Chicago // IL/60607; Saga Univ, Inst Ocean Energy, Saga 8408502 // Japan /

Journal: JOURNAL OF ENERGY RESOURCES TECHNOLOGY-TRANSACTIONS

OF THE ASME, 2007, V 129, N3 (SEP), P 243-247

ISSN: 0195-0738 **Publication Date:** 20070900

Publisher: ASME-AMER SOC MECHANICAL ENG, THREE PARK AVE, NEW

YORK, NY 10016-5990 USA

Language: English Document Type: ARTICLE

Geographic Location: USA; Japan

Journal Subject Category: ENERGY & FUELS

Abstract: The possibility of exploiting low-temperature heat sources has been of great significance with ever increasing energy demand. Optimum and cost-effective design of the power cycles provide a means of utilization of low-temperature heat sources which might otherwise be discarded. In this analysis, the performance of the Kalina cycle system 11 (KCS11) is examined, for low-temperature geothermal heat sources and is compared with an organic Rankine cycle. The effect of the ammonia fraction and turbine inlet pressure on the cycle performance is investigated in detail. Results show; that for a given turbine inlet pressure, an optimum ammonia fraction can be found that yields the maximum cycle efficiency. Further the maximum cycle efficiency does not necessarily yield the optimum operating conditions for the system. In addition, it is important to consider the utilization of the various circulating media (i.e., working fluid, cooling water and heat resource) and heat exchanger area per unit power produced. For given conditions, an optimum range of operating pressure and ammonia fraction can be identified that result in optimum. cycle performance. In general, the KCS11 has better overall performance at moderate pressures than that of the organic Rankine cycle.

Descriptors: SCIAuthor Keywords: kalina cycle system (KCS11); ammonia; isobutane; Rankine cycle; optimun performance

Identifiers: KeyWord Plus(R): PLATE-TYPE EVAPORATOR; SHELL; POWER; OTEC; ORCS

Cited References:

US 4346561, 1982, KALINA AI ANGELINO G, 1998, V23, P449, ENERGY

BADR O, 1990, V36, P263, APPL ENERG

DEMUTH OJ, 1980, V1, P798, P 15 INT EN CONV ENG

HUNG TC, 1997, V22, P661, ENERGY

IBRAHIM OM, 1996, V21, P21, ENERGY

IQBAL KZ, 1976, V56, P110, P OKLA ACAD SCI

ITOI R, 2001, PROGRAM PACKAGE THER

KALINA AI, 1984, V106, P737, J ENG GAS TURB POWER

KALINA AI, 1983, P1, 83JPGCGT3 AM SOC MEC

KALINA AI, 1989, V13, P605, T GEOTHERM RESOUR CO NAKAOKA T, 1988, V1, P283, EXPT THERMAL FLUID S NAKAOKA T, 1988, V1, P275, EXP THERM FLUID SCI UEHARA H, 1997, V119, P160, J SOL ENERG-T ASME UEHARA H, 1984, V166, P286, J SOLAR ENERGY ENG

Dialog eLink:

7/5/40 (Item 11 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

16569976 Genuine Article#: 175ZE Number of References: 23

Title: The effect of longitudinal heat conduction in cross flow indirect evaporative air coolers

Author: Hettiarachchi HDM; Golubovic M; Worek WM (REPRINT)

Corporate Source: Univ Illinois, Engn Res Facil 2039, Dept Mech & Ind Engn, MIC 251,842 W Taylor St/Chicago//IL/60607 (REPRINT); Univ Illinois, Engn Res Facil 2039,

Dept Mech & Ind Engn, MIC 251, Chicago//IL/60607

Journal: APPLIED THERMAL ENGINEERING, 2007, V 27, N11-12 (AUG), P

1841-1848

ISSN: 1359-4311 **Publication Date:** 20070800

Publisher: PERGAMON-ELSEVIER SCIENCE LTD , THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Language: English Document Type: ARTICLE

Geographic Location: USA

Journal Subject Category: THERMODYNAMICS; ENERGY & FUELS;

ENGINEERING, MECHANICAL; MECHANICS

Abstract: The effect of the longitudinal heat conduction in the exchanger wall of a compact-plate cross flow indirect evaporative cooler is investigated. A NTU method is used to study the heat and mass transfer characteristics. A block iterative numerical method is used to solve the coupled conservation equations for the primary fluid, the secondary fluid and the liquid film. The model was validated using previously published data. The exchanger performance deterioration due to the conduction effect has been determined for various design and operating conditions. The results indicate that the thermal performance deterioration of the evaporative coolers may become significant for some typical operating conditions and could be as high as 10%, while it lies less than 5% for most conservative conditions. (C) 2007 Elsevier Ltd. All rights reserved.

Descriptors: SCIAuthor Keywords: evaporative cooler; longitudinal conduction; plate heat exchanger; cross flow

Identifiers: KeyWord Plus(R): DRAFT COOLING-TOWER; EXCHANGERS;

WATER; PERFORMANCE; MODEL

Cited References:

BAHNKE G, 1984, V86, P105, T ASME CHIOU JP, 1980, V10, P101, COMPACT HEAT EXCHANG CHIOU JP, 1978, V100, P346, ASME

ERENS PJ, 1993, V36, P17, INT J HEAT MASS TRAN

FISENKO SP, 2002, V45, P4683, INT J HEAT MASS TRAN

FISENKO SP, 2004, V47, P165, INT J HEAT MASS TRAN

HALASZ B, 1998, V37, P245, REV GEN THERM

KEYS W, 1964, COMPACT HEAT EXCHANG

KLOPPERS JC, 2005, V48, P765, INT J HEAT MASS TRAN

LANDU H, 1960, 60WA236 ASME

MACLAINECROSS IL, 1981, V103, P579, J HEAT TRANSFER

NAPHON P, 2005, V32, P1064, INT COMMUN HEAT MASS

NARAYANAN SP, 1998, V38, P927, CRYOGENICS

PARKER R, 1961, V57, P139, AICHE CHEM ENG PROG

PATANKAR S, 1988, HDB NUMERICAL HEAT T

PESCOD D, 1966, V22, P22, AUST REFRIG AIR COND

PETERSON JL, 1992, V98, P15, ASHRAE T

PETERSON JL, 1993, V99, P392, ASHRAE T

RANGANAYAKULU C, 1997, V40, P1261, INT J HEAT MASS TRAN

SHAH RK, 1994, V16, P15, J ENERGY HEAT MASS T

SHAH RK, 1975, V97, P453, ASME

SONG CH, 2003, V46, P1241, INT J HEAT MASS TRAN

STOITCHKOV NJ, 1998, V21, P463, INT J REFRIG

Dialog eLink:

7/5/41 (Item 12 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

14234324 Genuine Article#: 928DD Number of References: 0

Title: Hemostasis abnormalities in Gaucher disease

Author: Vukosavljevic D; Sumarac Z; Golubovic M; Suvajdic-Vukovic N; Mitrovic M;

Dopsaj V; Majkic-Singh N

Author Email Address: zsumarac@eunet.yu

Corporate Source: Clin Ctr Serbia, Inst Med Biochem, Belgrade//Serbia Monteneg/; Clin

Ctr Serbia, Inst Hematol, Belgrade//Serbia Monteneg/

Journal: CLINICA CHIMICA ACTA , 2005 , V 355 , S (MAY) , P S294-S295

ISSN: 0009-8981 **Publication Date:** 20050500

Publisher: ELSEVIER SCIENCE BV, PO BOX 211, 1000 AE AMSTERDAM,

NETHERLANDS

Language: English **Document Type:** MEETING ABSTRACT

Geographic Location: Serbia Monteneg

Journal Subject Category: MEDICAL LABORATORY TECHNOLOGY

Dialog eLink:

7/5/42 (Item 13 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

14069663 Genuine Article#: 938ZB Number of References: 16

Title: Novel method for the production of pure glycinin from soybeans

Author: Golubovic M; van Hateren SH; Ottens M; Witkamp GJ; van der Wielen LAM

(REPRINT)

Author Email Address: L.A.M.vanderWielen@tnw.tudelft.nl

Corporate Source: Delft Univ Technol, Dept Biotechnol, Julianalaan 67/NL-2628 BC Delft/Netherlands/ (REPRINT); Delft Univ Technol, Dept Biotechnol, NL-2628 BC

Delft//Netherlands/; Delft Univ Technol, Lab Proc Equipment, NL-2628 CA

Delft//Netherlands/

Journal: JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY, 2005, V 53,

N13 (JUN 29), P 5265-5269

ISSN: 0021-8561 **Publication Date:** 20050629

Publisher: AMER CHEMICAL SOC, 1155 16TH ST, NW, WASHINGTON, DC

20036 USA

Language: English Document Type: ARTICLE

Geographic Location: Netherlands

Journal Subject Category: AGRICULTURE, MULTIDISCIPLINARY; CHEMISTRY,

APPLIED; FOOD SCIENCE & TECHNOLOGY

Abstract: A novel method for the purification of glycinin from soy meal is presented. The method is based on the isoelectric precipitation of glycinin by using carbon dioxide as a volatile precipitant. Gaseous CO2 was pressurized into the protein solution, thus lowering the pH and initiating glycinin precipitation. Pressurization and, consequently, acidification were done in a slow and controlled manner, with the end point of pH 6.4. The acidity of the protein solution was well controlled via the pressure of gaseous CO2. In this way simultaneous precipitation of other soybean proteins was prevented and very pure glycinin was obtained. Approximately 40% of the glycinin present in the protein solution was recovered with purity as high as 98%. The purification process was successfully performed on both small and large scales, without affecting glycinin purity.

Descriptors: SCIAuthor Keywords: soybean proteins; purification; glycinin; carbon dioxide; isoelectric precipitation

Identifiers: KeyWord Plus(R): BETA-CONGLYCININ; CARBON-DIOXIDE; SOY GLYCININ; PROTEIN; FRACTIONATION; ACID; PRECIPITATION; SUBUNITS **Cited References:**

CHAN MYY, 1982, V24, P1897, BIOTECHNOL BIOENG FISHER RR, 1986, V28, P1056, BIOTECHNOL BIOENG HOFLAND GW, 2000, V743, P357, J CHROMATOGR B HOFLAND GW, 2003, V13, P685, INT DAIRY J LAKEMOND CMM, 2002, V50, P4275, J AGR FOOD CHEM LAKEMOND CMM, 2003, V17, P365, FOOD HYDROCOLLOID

LALLES JP, 1999, V47, P2797, J AGR FOOD CHEM

LIU K, 1997, SOYBEANS CHEM TECHNO
RIBLETT AL, 2001, V49, P4983, J AGR FOOD CHEM
STASWICK PE, 1984, V259, P3431, J BIOL CHEM
THANH VH, 1976, V24, P1117, J AGR FOOD CHEM
THANH VH, 1975, V56, P19, PLANT PHYSIOL
THIERING R, 2001, V73, P1, BIOTECHNOL BIOENG
VANKONINGSVELD GA, 2002, V50, P2947, J AGR FOOD CHEM
WU SW, 1999, V76, P285, J AM OIL CHEM SOC
ZHANG GY, 2003, V80, P497, J AM OIL CHEM SOC

Dialog eLink:

7/5/43 (Item 14 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

13112458 Genuine Article#: 850SN Number of References: 23

Title: Preparation, optimization, and structures of cross-linked enzyme aggregates (CLEAs)

Author: Schoevaart R; Wolbers MW; Golubovic M; Ottens M; Kieboom APG; van

Rantwijk F; van der Wielen LAM; Sheldon RA (REPRINT)

Author Email Address: r.a.sheldon@tnw.tudelft.nl

Corporate Source: Delft Univ Technol, Dept Biotechnol, Julianalaan 136/NL-2628 BL Delft//Netherlands/ (REPRINT); Delft Univ Technol, Dept Biotechnol, NL-2628 BL

Delft//Netherlands/; Delft Univ Technol, Dept Biotechnol, NL-2628 BC Delft//Netherlands/; Leiden Univ, Ind Fermentat Chem, NL-2300 RA

Leiden//Netherlands/

Journal: BIOTECHNOLOGY AND BIOENGINEERING, 2004, V 87, N6 (SEP 20), P 754-762

ISSN: 0006-3592 **Publication Date:** 20040920

Publisher: JOHN WILEY & SONS INC, 111 RIVER ST, HOBOKEN, NJ 07030 USA

Language: English Document Type: ARTICLE

Geographic Location: Netherlands

Journal Subject Category: BIOTECHNOLOGY & APPLIED MICROBIOLOGY **Abstract:** The broad applicability of the cross-linking of enzyme aggregates to the effective immobilisation of enzymes is demonstrated and the influence of many parameters on the properties of the resulting CLEAs is determined, The relative simplicity of the operation ideally lends itself to high-throughput methodologies. The aggregation method was improved up to 100% activity yield for any enzyme. For the first time, the physical structures of CLEAs are elucidated. (C) 2004 Wiley Periodicals, Inc.

Descriptors: SCIAuthor Keywords: immobilization; CLEA; CLEC; protein

Identifiers: KeyWord Plus(R): PENICILLIN ACYLASE; CRYSTALLINE STATE;

IMMOBILIZATION; DEHYDROGENASE; CATALYSTS; PROTEIN

Cited References:

ASAAD N, 2003, V125, P6874, J AM CHEM SOC

AVIGAD G, 1962, V237, P2736, J BIOL CHEM BOLLER T, 2002, V6, P509, ORG PROCESS RES DEV BOURBONNAIS R, 1990, V267, P99, FEBS LETT CAO L, 2001, V11, P665, J MOL CATAL B-ENZYM CAO LO, 2000, V2, P1361, ORG LETT CAO LQ, 2003, V14, P287, CURR OPIN BIOTECH DOSCHER MS, 1963, V238, P2399, J BIOL CHEM DVORAKOVA J, 1997, V42, P349, FOLIA MICROBIOL GROGER H, 2004, V60, P633, TETRAHEDRON HARING D, 1999, V3, P35, CURR OPIN CHEM BIOL HOFLAND GW, 2000, V743, P357, J CHROMATOGR B KIM CS, 2003, V25, P1769, BIOTECHNOL LETT KRAGL U, 1996, P271, IND ENZYMOLOGY APPL LALONDE J, 1997, V27, P38, CHEMTECH LOPEZSERRANO P, 2002, V24, P1379, BIOTECHNOL LETT MARGOLIN AL, 2001, V40, P2204, ANGEW CHEM INT EDIT MARGOLIN AL, 1996, V14, P223, TRENDS BIOTECHNOL MESSING RA, 1975, IMMOBILIZED ENZYMES QUIOCHO FA, 1964, V52, P833, P NATL ACAD SCI USA RELLA R, 1987, V167, P475, EUR J BIOCHEM STCLAIR NL, 1992, V114, P7314, J AM CHEM SOC VANLANGEN LM, 2002, V79, P224, BIOTECHNOL BIOENG

Dialog eLink:

7/5/44 (Item 15 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

12767730 Genuine Article#: 817VR Number of References: 0

Title: Low molecular weight heparins in acute myocardial infarction (MI)

Author: Petrovic M; Panic G; Srdanovic I; Canji T; Jung R; Debeljacki D; Bikicki M;

Ivanovic V; Golubovic M; Benc D

Corporate Source: Inst Cardiovasc Dis, Clin Cardiol, Sremska Komenica/Serbia Monteneg/Yugoslavia/; Inst Cardiovasc Dis, Cardiovasc Surg Clin, Sremska

Komenica/Serbia Monteneg/Yugoslavia/

Journal: HEART , 2004 , V 90 , 3 (MAY) , P A4-A4

ISSN: 1355-6037 **Publication Date:** 20040500

Publisher: B M J PUBLISHING GROUP, BRITISH MED ASSOC HOUSE,

TAVISTOCK SQUARE, LONDON WC1H 9JR, ENGLAND **Language:** English **Document Type:** MEETING ABSTRACT

Meeting Abstract Number: 13 Geographic Location: Yugoslavia

Journal Subject Category: CARDIAC & CARDIOVASCULAR SYSTEMS

Dialog eLink:

7/5/45 (Item 16 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

07321225 Genuine Article#: 150HT Number of References: 1

Title: Fluctuations of quasi-two-dimensional smectics intercalated between membranes in multilamellar phases of DNA-cationic lipid complexes (vol 80, pg 4341, 1998)

Author: Golubovic L; Golubovic M

Journal: PHYSICAL REVIEW LETTERS, 1998, V 81, N25 (DEC 21), P 5704-5704

ISSN: 0031-9007 **Publication Date:** 19981221

Publisher: AMERICAN PHYSICAL SOC, ONE PHYSICS ELLIPSE, COLLEGE PK,

MD 20740-3844

Language: English Document Type: CORRECTION, ADDITION

Subfile: CC PHYS--Current Contents, Physical, Chemical & Earth Sciences

Journal Subject Category: PHYSICS

Cited References:

GOLUBOVIC L, 1998, V80, P4341, PHYS REV LETT

Dialog eLink:

7/5/46 (Item 17 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

06713611 Genuine Article#: ZM538 Number of References: 13

Title: Fluctuations of quasi-two-dimensional smectics intercalated between membranes in multilamellar phases of DNA cationic lipid complexes

Author: Golubovic L (REPRINT); Golubovic M

Corporate Source: W VIRGINIA UNIV,DEPT PHYS/MORGANTOWN//WV/26506

(REPRINT)

Journal: PHYSICAL REVIEW LETTERS, 1998, V 80, N19 (MAY 11), P 4341-

4344

ISSN: 0031-9007 **Publication Date:** 19980511

Publisher: AMER INST PHYSICS, CIRCULATION FULFILLMENT DIV, 500

SUNNYSIDE BLVD, WOODBURY, NY 11797-2999 Language: English Document Type: ARTICLE

Geographic Location: USA

Subfile: CC PHYS--Current Contents, Physical, Chemical & Earth Sciences

Journal Subject Category: PHYSICS

Abstract: We theoretically elucidate lamellar phases of DNA-cationic lipid complexes as the very first realization of a decoupled phase of strongly fluctuating 2D smectic DNA manifolds weakly interacting across membranes. Because of couplings between adjacent

2D smectic L-x X L-y planes, recently observed ordinary 2D smectic behavior of DNA in-plane undulations, with [u(2)] similar to L-y(1/2) similar to L-x, must cross over, at long scales, to a novel fluctuation behavior, with [u(2)] similar to $(\ln L(y))(2)$ similar to $(\ln L(x))(2)$.

Identifiers: KeyWord Plus(R): ITERATED MOIRE MAPS; PARISI-ZHANG MODEL; ELASTICITY; CRYSTALS

Cited References:

DEGENNES PG, 1993, PHYSICS LIQUID CRYST GOLUBOVIC L, 1991, V43, P6793, PHYS REV A GOLUBOVIC L, 1994, V49, P2567, PHYS REV E GOLUBOVIC L, 1990, V65, P1963, PHYS REV LETT GOLUBOVIC L, 1992, V69, P2535, PHYS REV LETT GOLUBOVIC L, UNPUB KAMIEN RD, 1996, V53, P650, PHYS REV E KAMIEN RD, 1995, V74, P2499, PHYS REV LETT OHERN C, 1998, V80, P4345, PHYS REV LETT RADLER JO, 1997, V275, P810, SCIENCE SALDITT T, 1997, V79, P2582, PHYS REV LETT TONER J, 1981, V23, P316, PHYS REV B TONER J, 1990, V64, P1741, PHYS REV LETT

Dialog eLink:

7/5/47 (Item 18 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

06147682 Genuine Article#: XY130 Number of References: 20 Title: Nonequilibrium size distributions of fluid membrane vesicles

Author: Golubovic L (REPRINT); Golubovic M

Corporate Source: W VIRGINIA UNIV, DEPT PHYS/MORGANTOWN//WV/26506

(REPRINT)

Journal: PHYSICAL REVIEW E , 1997 , V 56 , N3,B (SEP) , P 3219-3230

ISSN: 1063-651X **Publication Date:** 19970900

Publisher: AMER INST PHYSICS, CIRCULATION FULFILLMENT DIV, 500

SUNNYSIDE BLVD, WOODBURY, NY 11797-2999 Language: English Document Type: ARTICLE

Geographic Location: USA

Subfile: CC PHYS--Current Contents, Physical, Chemical & Earth Sciences

Journal Subject Category: PHYSICS, MATHEMATICAL; PHYSICS, FLUIDS &

PLASMAS

Abstract: We investigate nonequilibrium behavior of polydisperse ensembles of fluid membrane vesicles by means of a diffusive Boltzmann transport equation that incorporates vesicle diffusion and reactions between vesicles. This approach is used to study time evolutions of size distributions of initially monodisperse vesicle ensembles.

We investigate various nonequilibrium paths that ensembles of vesicles may follow during the equilibration process. Depending on the initial size distribution of vesicles, the thermodynamic equilibrium may be reached either via a fusional growth of vesicles, or via their fissional decay. In the former case, typical vesicle size grows as R(t)similar to t(1/2) Until it saturates to its equilibrium value, whereas in the latter case we find that vesicle size decays in a finite time proportional to [R(0)](1/3), where R(0) is the initial vesicle size. The latter behavior is related to the length scale dependence of membrane bending and saddle splay rigidity.

Identifiers: KeyWord Plus(R): PHASE-BEHAVIOR; MICROEMULSIONS;

FLUCTUATIONS; EQUILIBRIUM; PASSAGES; DILUTE

Cited References:

CHERNOMORDIK LV, 1995, V5, P541, CURR OPIN STRUC BIOL

DAVID F, 1989, P158, STAT MECH MEMBRANES

DEVRIES R, 1995, V103, P6740, J CHEM PHYS

GOLUBOVIC L, 1990, V41, P4343, PHYS REV A

GOLUBOVIC L, 1989, V39, P12110, PHYS REV B

GOLUBOVIC L, 1994, V50, PR2419, PHYS REV E

GREGORIADIS G, 1984, LIPOSOME TECHNOLOGY

GREGORIADIS G, 1980, LIPOSOMES BIOL SYSTE

HERVE P, 1993, V3, P1255, J PHYS II

HUSE DA, 1988, V49, P605, J PHYS-PARIS

KNIGHT CG, 1991, LIPOSOMES PHYSICAL S

MITOV MD, 1978, V31, P513, CR ACAD BULGARE SCI

MORSE DC, 1994, V26, P565, EUROPHYS LETT

MORSE DC, 1994, V50, PR2423, PHYS REV E

MORSE DC, 1995, V52, P5918, PHYS REV E

NELSON DR, 1989, STAT MECH MEMBRANES

OSTROWSKY N, 1993, V64, P45, CHEM PHYS LIPIDS

SAFRAN SA, 1986, V57, P491, PHYS REV LETT

SIMONS BD, 1992, V2, P1439, J PHYS II

WINTERHALTER M, 1993, V64, P35, CHEM PHYS LIPIDS

Dialog eLink:

7/5/48 (Item 19 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci

(c) 2010 The Thomson Corp. All rights reserved.

05419022 Genuine Article#: VW891 Number of References: 0

Title: CONCENTRATION OF D-DIMER IN PATIENTS WITH PULMONARY-EMBOLISM

Author: GOLUBOVIC M; MAJKICSINGH N; VUKOSAVLJEVIC D; MAKSIC N;

DURDEVIC V

Corporate Source: INST MED BIOCHEM, CLIN CTR

SERBIA/BELGRADE//YUGOSLAVIA/

Journal: JUGOSLOVENSKA MEDICINSKA BIOHEMIJA-YUGOSLAV MEDICAL

BIOCHEMISTRY, 1996, V 15, N4 (OCT-DEC), P 302

ISSN: 0354-3447

Language: ENGLISH Document Type: ARTICLE

Geographic Location: YUGOSLAVIA

Subfile: SciSearch

Journal Subject Category: BIOCHEMISTRY & MOLECULAR BIOLOGY;

BIOPHYSICS **Descriptors:** SCI

Dialog eLink:

7/5/49 (Item 20 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

05418946 Genuine Article#: VW891 Number of References: 0

Title: SELECTION OF METHODS FOR DETERMINATION OF DIALYSATE

ANALYTES

Author: VODNIK T; GOLUBOVIC M; DURDEVIC V; MAKSIC M

Corporate Source: CLIN CTR SERBIA, INST MED

BIOCHEM/BELGRADE//YUGOSLAVIA/

Journal: JUGOSLOVENSKA MEDICINSKA BIOHEMIJA-YUGOSLAV MEDICAL

BIOCHEMISTRY, 1996, V 15, N4 (OCT-DEC), P 242

ISSN: 0354-3447

Language: ENGLISH Document Type: ARTICLE

Geographic Location: YUGOSLAVIA

Subfile: SciSearch

Journal Subject Category: BIOCHEMISTRY & MOLECULAR BIOLOGY;

BIOPHYSICS Descriptors: SCI

Dialog eLink:

7/5/50 (Item 21 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

04488222 Genuine Article#: TG336 Number of References: 12

Title: NATURE OF ENVIRONMENTALLY ASSISTED FRACTURE NUCLEATION AND CRACK-GROWTH IN POLYCRYSTALS

Author: GOLUBOVIC L; PEREDERA A; GOLUBOVIC M

Corporate Source: W VIRGINIA UNIV, DEPT PHYS/MORGANTOWN//WV/26506

Journal: PHYSICAL REVIEW E , 1995 , V 52 , N5 (NOV) , P 4640-4645

ISSN: 1063-651X

Language: ENGLISH Document Type: ARTICLE

Geographic Location: USA

Subfile: SciSearch; CC PHYS--Current Contents, Physical, Chemical & Earth Sciences **Journal Subject Category:** PHYSICS, MATHEMATICAL; PHYSICS, FLUIDS &

PLASMAS

Abstract: Environmentally assisted fracture is, in practice, one of the most important fracture modes. We use a large scale atomistic Monte Carlo simulation to study phenomena of the environmentally assisted fracture nucleation in solids with grain boundaries. We study a bicrystal under a tensile stress exposed to an oxidizing atmosphere. We identify conditions under which this environment can significantly enhance intergranular fracture nucleation processes. We find that the nucleation of intergranular microcavities may occur in a region that is well in front of the oxidized zone of the sample, apparently due to inhomogeneous stresses induced by the presence of oxide particles. This effect increases with decreasing oxidation late, since then the oxidation front becomes fuzzier and inhomogeneous stresses become stronger. Similar trends were observed in superalloys in which the environmental embrittlement effects are strong for slower oxidation rates, whereas at higher oxidation rates the embrittlement may be suppressed.

Descriptors: SCI

Identifiers: KeyWords Plus: TEMPERATURE; STRENGTH; SOLIDS

Cited References:

BRENNER SS, 1965, P11, FIBER COMPOSITE MATE

GOLUBOVIC L, 1991, V43, P5223, PHYS REV A

GOLUBOVIC L, 1995, V51, P2799, PHYS REV E

GRABKE HJ, 1991, V35, P199, OXID MET

HIPPSLEY CA, 1989, V37, P1485, ACTA METALL

KING B, COMMUNICATION

NISHIOKA K, 1981, V44, P779, PHILOS MAG A

PUGH SF, 1991, INTRO GRAIN BOUNDARY

SELINGER RLB, 1991, V95, P9128, J CHEM PHYS

SELINGER RLB, 1991, V43, P4396, PHYS REV A

VALERIO P, 1994, V30, P1269, SCRIPTA METALL MATER

WANG ZG, 1991, V44, P378, PHYS REV B

Dialog eLink:

7/5/51 (Item 22 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

03028103 Genuine Article#: MY050 Number of References: 5

Title: CHANGES OF URINARY BETA-2-MICROGLOBULIN AFTER RENAL-

TRANSPLANTATION

Author: SIMICOGRIZOVIC S; DJUKANOVIC L; GOLUBOVIC M

Corporate Source: UNIV BELGRADE, CTR CLIN, INST UROL &

NEPHROL, NEPHROL CLIN, PASTEROVA 2/YU-11000

BELGRADE//YUGOSLAVIA/; UNIV BELGRADE,CTR CLIN,CLIN BIOCHEM

LAB/BELGRADE//YUGOSLAVIA/

Journal: NEPHRON, 1994, V 66, N3 (MAR), P 354-355

ISSN: 0028-2766

Language: ENGLISH Document Type: LETTER

Geographic Location: YUGOSLAVIA

Subfile: SciSearch; CC LIFE--Current Contents, Life Sciences; CC CLIN--Current

Contents, Clinical Medicine

Journal Subject Category: UROLOGY & NEPHROLOGY

Descriptors: SCI Cited References:

HORPACSY G, 1983, P105, CONTRIB NEPHROL LIPKOWITZ G, 1989, V21, P1526, TRANSPLANT P

NISHI S, 1992, V61, P485, NEPHRON PRISCHL F, 1989, V51, P330, NEPHRON

VINCENT C, 1979, V11, P438, TRANSPLANT P

Dialog eLink:

7/5/52 (Item 1 from file: 71)

DIALOG(R)File 71: ELSEVIER BIOBASE (c) 2010 Elsevier B.V. All rights reserved.

0005748650 **Supplier Number:** 2004245514

Preparation, optimization, and structures, of cross-linked enzyme aggregates (CLEAs)

Schoevaart R.; Wolbers M.W.; Golubovic M.; Ottens M.; Kieboom A.P.G.; Van

Rantwijk F.; Van Der Wielen L.A.M.; Sheldon R.A.

Author Email: r.a.sheldon@tnw.tudelft.nl

Corresp. Author/Affil: Sheldon R.A., Biocatalysis and Organic Chemistry, Department of Biotechnology, Delft University of Technology, Julianalaan 136, 2628 BL Delft, Netherlands

Corresp. Author Email: r.a.sheldon@tnw.tudelft.nl

Journal: Biotechnology and Bioengineering (Biotechnol. Bioeng.), v87, n6, (754-762),

2004, United States

Publication Date: September 20, 2004 (20040920)

Coden: BIBIA

ISSN: 0006-3592 eISSN: 1471-2970 DOI: http://dx.doi.org/10.1002/bit.20184

Record Type: Abstract; New **Document Type:** Article

Languages: English Summary Languages: English

No. of References: 23

The broad applicability of the cross-linking of enzyme aggregates to the effective immobilisation of enzymes is demonstrated and the influence of many parameters on the properties of the resulting CLEAs is determined. The relative simplicity of the operation ideally lends itself to high-throughput methodologies. The aggregation method was improved up to 100% activity yield for any enzyme. For the first time, the physical structures of CLEAs are elucidated. (c) 2004 Wiley Periodicals, Inc.

Descriptors:

CLEA; CLEC; Immobilization; Protein

Classification Code and Description:

82 (PROTEIN BIOCHEMISTRY) 82.3 (PROTEIN ENGINEERING) 82.3.1 (Design and Theoretical Studies)

Record History: New; Created: October 12, 2004 (20041012); Delivered: June 19,

2008 (20080619)

Dialog Update Date: 20081210; 22:56:18 EST

Dialog eLink:

7/5/53 (Item 1 from file: 72) DIALOG(R)File 72: EMBASE

(c) 2010 Elsevier B.V. All rights reserved.

0083802408 EMBASE/MEDLINE No: 20162031

Laryngeal adenoid cystic carcinoma

Carcinoma adenoidocistico della laringe

Zvrko E.; Golubovic M.

Clinic for Otorhinolaryngology and Maxillofacial Surgery, Podgorica, Montenegro

Author email: elvirz@t-com.me

Corresp. Author/Affil: Zvrko E.: Klinika za ORL i MFH, Ljubljanska bb, 81000

Podgorica, Montenegro

Corresp. Author Email: elvirz@t-com.me

Acta Otorhinolaryngologica Italica (Acta Otorhinolaryngol. Ital.) (Italy) October 1, 2009, 29/5 (279-282)

CODEN: AOITD ISSN: 0392-100X eISSN: 1827-675X URL: http://www.actaitalica.it/issues/2009/5-09/Zvrko.pdf

Document Type: Journal; Article Record Type: Abstract File Segment: Medline

Language: Italian Summary language: English; Italian

Number of References: 12

Adenoid cystic carcinomas are malignant tumours and occur in the major and the minor salivary glands. Laryngeal adenoid cystic carcinomas are rare and account for less than

1% of all malignant tumours in the larynx. Adenoid cystic carcinoma is characterised by slow progression, multiple recurrences and late distant metastasis. The aetiology of adenoid cystic carcinoma remains unknown. They usually originate in the supraglottic or subglottic area. Wide-margin surgery alone or in combination with post-operative radiotherapy is the best tumour management. In this article, the case of laryngeal adenoid cystic carcinoma is described in a 55-year-old male patient who presented with a 3-month history of prelaryngeal pain. The patient underwent total laryngectomy and post-operative radiotherapy. For patients with laryngeal adenoid cystic carcinomas, regular and long-term follow-up is mandatory, in order to detect relapses and metastases.

Medical Descriptors:

* adenoid cystic carcinoma--surgery--su; *larynx tumor--surgery--su article; biopsy; case report; computer assisted tomography; human; laryngectomy; male; middle aged; pathology; radiography

Dialog eLink:

7/5/54 (Item 2 from file: 72) DIALOG(R)File 72: EMBASE

(c) 2010 Elsevier B.V. All rights reserved.

0083542982 **EMBASE/MEDLINE No:** 2010083268

Correlation between disease progression and histopathologic criterions of the lip squamous cell carcinoma

Povezanost histopatoloskih karakteristika karcinoma usne sa progresijom bolesti

Golubovic M.; Asanin B.; Jelovac D.; Petrovic M.; Antunovic M.

Medicinski Fakultet, Klinicki Centar Crne Gore, Centar za Patologiju I Sudsku

Medicinu, Podgorica, Croatia

Author email: miletagol@t-com.me

Corresp. Author/Affil: Golubovic M.: Medicinski Fakultet, Klinicki Centar Crne Gore,

Centar za Patologiju I Sudsku Medicinu, Podgorica, Croatia

Corresp. Author Email: miletagol@t-com.me

Vojnosanitetski Pregled (Vojnosanit. Pregl.) (Serbia) January 1, 2010, 67/1 (19-24)

CODEN: VSPRA **ISSN:** 0042-8450

URL: http://www.vma.mod.gov.rs/vsp/download/vsp_01_10.pdf
Document Type: Journal; Article Record Type: Abstract
Language: Croatian Summary language: English; Croatian

Number of References: 33

Background/Aim. The most common malignancy of the lip is squamous cell carcinoma (SCC). In our population, according to epidemiological data, almost a half of all (45%) SCC of oral mucous tissue spreads over the lower and upper lip. The aim of this study was to estimate prognostic importance of histopathologic characteristics - histologic grade, nuclear grade and tumor size in relation to the appearance of lymph node

metastases and relapse in SCC of the lip. Methods. In the retrospective-prospective study 70 cases of lower and upper lip SCC were analyzed. They were diagnosed from 2002 to 2006 in the Clinic of Maxillofacial Surgery, Clinical Center of Montenegro. The data about localization of the carcinomas, histopathologic characteristics and lymph node status were taken from medical files of the patients. The patients were followed up in a 3year period and the disease relapse or/and metastatic disease appearance were registereds. Results. There was statistically significant difference in tumor size among the patients with and without disease relapse (p = 0.027). Logistic regression analysis showed that the tumor size is a statistically significant factor (R = 0.186; p = 0.011) for the appearance of regional lymph node metastases. Relative risk [exp (B)] for the appearance of regional lymph node metastases in relation to tumor size was 2.807. Conclusion. Histologic and nuclear grade of lip SCC are not prognostic factors for the appearance of the disease relapse and regional lymph node metastases. Tumor size is a predictive factor of the relapse appearance, as well as for lymph node metastases appearance. In clinical practice, tumor size is a factor that classifies patients with lip SCC into the groups of higher and smaller risk of relapse appearance and for lymph node metastases appearance. Our results suggest that, risk for lymph node metastases appearance increases 2.8 times with increasing of the tumor size over 2 cm in diameter.

Medical Descriptors:

* lip carcinoma-diagnosis-di; *lip carcinoma-surgery-su; *squamous cell carcinoma-diagnosis-di; *squamous cell carcinoma-surgery-su adult; aged; article; cancer diagnosis; cancer grading; cancer patient; cancer relapse; cancer size; cancer surgery; clinical feature; clinical practice; disease classification; disease course; epidemiological data; female; follow up; histopathology; human; human tissue; lymph node metastasis; major clinical study; male; maxillofacial surgery; retrospective study; tumor volume; upper lip

SECTION HEADINGS:

General Pathology and Pathological Anatomy Otorhinolaryngology Cancer Public Health, Social Medicine and Epidemiology

Dialog eLink:

7/5/55 (Item 3 from file: 72)
DIALOG(R)File 72: EMBASE
(a) 2010 Elsovior R. V. All rights a

(c) 2010 Elsevier B.V. All rights reserved.

0083322644 **EMBASE/MEDLINE No:** 2009559973

Rare type of quadricuspid aortic valve requiring surgical replacement

Susak S.; Torbica V.; Velicki L.; Golubovic M.

Clinic for Cardiovascular Surgery, Institute of Cardiovascular Diseases of Vojvodina,

Pecka 14 Novi, Sad 21000, Serbia

Author email: velar@sbb.rs

Corresp. Author/Affil: Velicki L.: Clinic for Cardiovascular Surgery, Institute of

Cardiovascular Diseases of Vojvodina, Pecka 14 Novi, Sad 21000, Serbia

Corresp. Author Email: velar@sbb.rs

Thoracic and Cardiovascular Surgeon (Thorac. Cardiovasc. Surg.) (Germany)

November 25, 2009, 57/6 (364-366)

CODEN: TVCHA ISSN: 0171-6425 eISSN: 1439-1902

Item Identifier (DOI): 10.1055/s-0029-1185563

Document Type: Journal; Article Record Type: Abstract

Language: English Summary language: English

Number of References: 8

Quadricuspid aortic valve, a rare congenital anomaly, is often related to severe aortic regurgitation and has a significant morbidity, The first described case was reported in 1862, Quadricuspid aortic valve is, in most cases, an isolated malformation, but it can be associated with other concomitant anomalies, We present here the case of a quadricuspid aortic valve discovered by intraoperative transesophageal echocardiography and successfully replaced with a mechanical aortic valve, Heart valve surgery, heart disease, cardiovascular surgery. (c) Georg Thieme Verlag KG Stuttgart New York.

Medical Descriptors:

* aorta anomaly--diagnosis--di; *aorta anomaly--surgery--su adult; anamnesis; aorta valve replacement; article; case report; clinical feature; human; male; physical examination; priority journal; transesophageal echocardiography; transthoracic echocardiography

Medical Terms (Uncontrolled): quadricuspid aortic valve--diagnosis--di; quadricuspid aortic valve --surgery--su

SECTION HEADINGS:

Cardiovascular Diseases and Cardiovascular Surgery

Dialog eLink:

7/5/56 (Item 4 from file: 72) DIALOG(R)File 72: EMBASE

(c) 2010 Elsevier B.V. All rights reserved.

0082180496 **EMBASE/MEDLINE No:** 2007594160

HER-2/neu overexpression in invasive ductal breast cancer - An association with other prognostic and predictive factors

Ivkovic-Kapicl T.; Knezevic-Usaj S.; Panjkovic M.; Dilas-Ivanovic D.; Golubovic M. Oncology Institute of Vojvodina, Sremska Kamenica, Serbia; Institutski put 4, 21204 Sremska Kamenica, Serbia

Author email: kapicl@Eunet.yu

Corresp. Author/Affil: Ivkovic-Kapicl T.: Oncology Institute of Vojvodina, Sremska

Kamenica, Serbia

Corresp. Author Email: kapicl@Eunet.yu

Archive of Oncology (Arch. Oncol.) (Serbia) July 1, 2007, 15/1-2 (15-18)

CODEN: ARONF **ISSN:** 0354-7310

Item Identifier (DOI): 10.2298/AOO0702015I

Document Type: Journal ; Article **Record Type:** Abstract

Language: English Summary language: English

Number of References: 32

Background: HER-2/neu is a proto-oncogene that is amplified/overexpressed in 15 to 30% of invasive breast cancers. The purpose of this study was to determine if any relationship exist between HER-2/neu protein overexpression and estrogen receptor (ER), progesterone receptor (PR), grade, size, and lymph node status in female breast cancer. Methods: A total of 100 cases of invasive ductal breast cancer were included in this study. The hormone receptors and HER-2/neu were studied immunohistochemically (IHC). Using the HER-2/neu DAKO scoring system, scores of 0, 1+ and 2+ were defined as negative and 3+ as positive. Results: HER-2/neu protein overexpression was seen in 20 (20%) of cases. HER-2/neu protein overexpression was present in 4 of 52 T1 lesions (8%), in 11 of 37 T2 lesions (30%), in 3 of 6 T3 lesions (50%), and in 2 of 5 T4 lesions (40%), (p<0.05). Protein overexpression was seen in 7 of 17 grade III tumors (41%), and 13 of 61 grade II tumors (21%). Overexpression was not detected in grade I tumors (p<0.01). Of the 20 Her-2/neu positive cases, ER- and PR-negative status was detected in 60% and 70%, respectively. Conclusion: Statistically significant correlation was found between HER-2/neu protein overexpression and large tumor size, high histological grade, and ER-, PR-negativity. There was no correlation with lymphonodal status. (c) 2007, Oncology Institute of Vojvodina.

Drug Descriptors:

* epidermal growth factor receptor 2--endogenous compound--ec estrogen receptor--endogenous compound--ec; hormone receptor--endogenous compound--ec

Medical Descriptors:

* breast cancer--diagnosis--di; *breast cancer--etiology--et article; cancer diagnosis; cancer invasion; correlation analysis; disease association; female; gene overexpression; histopathology; human; human tissue; immunohistochemistry; major clinical study; prognosis; scoring system; statistical significance; tumor volume

CAS Registry Number: 137632-09-8 (epidermal growth factor receptor 2) **SECTION HEADINGS:**

Cancer

Human Genetics Endocrinology

General Pathology and Pathological Anatomy

Dialog eLink:

7/5/57 (Item 5 from file: 72)
DIALOG(R)File 72: EMBASE
(a) 2010 Electrica R V. All rights r

(c) 2010 Elsevier B.V. All rights reserved.

0082175699 **EMBASE/MEDLINE No:** 2007589309

A method for lipase co-precipitation in a biodegradable protein matrix

Golubovic M.; Van Hateren S.H.; Ottens M.; Witkamp G.J.; Van Der Wielen L.A.M. Delft University of Technology, Department of Biotechnology, Julianalaan 67, 2628 BC Delft, Netherlands

Author email: m.ottens@tudelft.nl

Corresp. Author/Affil: Ottens M.: Delft University of Technology, Department of

Biotechnology, Julianalaan 67, 2628 BC Delft, Netherlands

Corresp. Author Email: m.ottens@tudelft.nl

Biotechnology and Bioengineering (Biotechnol. Bioeng.) (United States) December 15, 2007, 98/6 (1209-1218)

CODEN: BIBIA **ISSN:** 0006-3592 **eISSN:** 1097-0290

Item Identifier (DOI): 10.1002/bit.21499

Document Type: Journal; Article Record Type: Abstract

Language: English Summary language: English

Number of References: 37

This article presents a novel method for immobilization of active ingredients. The method is based on CO SUB 2 aided active ingredient co-precipitation with glycinin, a biodegradable protein matrix from edible soybean protein. Glycinin precipitates abundantly under isoelectric conditions and serves as the matrix within which the active substance is trapped during the precipitation process. The enzyme lipase from Candida rugosa was successfully co-precipitated into the protein pellet to prove the principle. It was shown that the lipase within the co-precipitate retained lipase and esterase activity under different pH conditions. In some cases the activity was even higher than the activity of crude lipase, possibly due to the protective role of the matrix protein. Due to the retained lipase activity and food-grade quality of the binary precipitate, it has potential of being used in the food or pharmaceutical industry. Additional quality of the binary precipitate is the potentially significantly reduced downstream processing due to the fact that no organic solvents or precipitants were used in the precipitation process. (c) 2007 Wiley Periodicals, Inc.

Drug Descriptors:

* matrix protein--endogenous compound--ec; *triacylglycerol lipase --endogenous compound--ec

glycinin--endogenous compound--ec; triacetin

Medical Descriptors:

amino acid sequence; article; biodegradability; Candida rugosa; controlled study; enzyme immobilization; Michaelis Menten kinetics; nonhuman; precipitation; protein analysis;

protein interaction

CAS Registry Number: 9007-93-6 (glycinin); 102-76-1 (triacetin); 9001-62-1

(triacylglycerol lipase) **SECTION HEADINGS:**

Clinical and Experimental Biochemistry

Dialog eLink:

7/5/58 (Item 6 from file: 72) DIALOG(R)File 72: EMBASE

(c) 2010 Elsevier B.V. All rights reserved.

0080227016 **EMBASE/MEDLINE No:** 2004406362

Preparation, optimization, and structures, of cross-linked enzyme aggregates (CLEAs)

Schoevaart R.; Wolbers M.W.; Golubovic M.; Ottens M.; Kieboom A.P.G.; Van Rantwijk F.; Van Der Wielen L.A.M.; Sheldon R.A.

Biocatalysis and Organic Chemistry, Department of Biotechnology, Delft University of Technology, Julianalaan 136, 2628 BL Delft, Netherlands; Industrial Fermentative Chemistry, Leiden University, P.O. Box 9502, 2300 RA Leiden, Netherlands

Author email: r.a.sheldon@tnw.tudelft.nl

Corresp. Author/Affil: Sheldon R.A.: Biocatalysis and Organic Chemistry, Department of Biotechnology, Delft University of Technology, Julianalaan 136, 2628 BL Delft, Netherlands

Corresp. Author Email: r.a.sheldon@tnw.tudelft.nl

Biotechnology and Bioengineering (Biotechnol, Bioeng.) (United States) September 20, 2004, 87/6 (754-762)

CODEN: BIBIA **ISSN:** 0006-3592 **Item Identifier (DOI):** <u>10.1002/bit.20184</u>

Document Type: Journal; Article Record Type: Abstract

Language: English Summary language: English

Number of References: 23

The broad applicability of the cross-linking of enzyme aggregates to the effective immobilisation of enzymes is demonstrated and the influence of many parameters on the properties of the resulting CLEAs is determined. The relative simplicity of the operation ideally lends itself to high-throughput methodologies. The aggregation method was improved up to 100% activity yield for any enzyme. For the first time, the physical structures of CLEAs are elucidated. (c) 2004 Wiley Periodicals, Inc.

Medical Descriptors:

* cross linking; *enzyme isolation; *enzyme structure; *protein aggregation article; enzyme activity; enzyme immobilization; high throughput screening; technique **SECTION HEADINGS:**

Clinical and Experimental Biochemistry

Dialog eLink:

7/5/59 (Item 7 from file: 72) DIALOG(R)File 72: EMBASE

(c) 2010 Elsevier B.V. All rights reserved.

0075805476 **EMBASE/MEDLINE No:** 1994216893

Laboratory analyses for non-invasive diagnosis of early kidney graft disorders

Simic-Ogrizovic S.; Dukanovic L.; Golubovic M.; Bogdanovic G.; Zarkovic M.; Micic-Oka J.; Simic T.

Institute of Urology and Nephrology, Department of Nephrology, Clinical Centre of Serbia, Pasterova 2, 11000 Belgrade, Yugoslavia

Corresp. Author/Affil: Simic-Ogrizovic S.: Institute of Urology and Nephrology, Department of Nephrology, Clinical Centre of Serbia, Pasterova 2, 11000 Belgrade, Yugoslavia

Jugoslovenska Medicinska Biokemija (JUGOSL. MED. BIOKEM.) (Yugoslavia)

August 9, 1994, 13/1-2 (31-35)

CODEN: JMBIE **ISSN:** 0352-1311

Document Type: Journal ; Article **Record Type:** Abstract **Language:** English **Summary language:** English; Serbian

The most frequent causes leading to kidney graft dysfunction in the early posttransplant period are acute rejection (AR), acute cyclosporin nephrotoxicity (CyAN) and acute tubular necrosis (ATN). The purpose of the paper was to determine by which laboratory analysis or the combination of several of them, AR may be most accurately differentiated from CyAN and ATN. In 50 patients, which were observed within the first 3 weeks after kidney transplantation, the following parameters were determined: cyclosporin (CyA) whole blood level, serum creatinine (sCr) and sodium levels, diuresis, urinary activities of N- acetyl-beta-D-glucosaminidase (NAG), alkaline phosphatase (AF), glutation-S-transferase (GST) then beta-2-microglobulin (beta2MG) and sodium (UNa) urine levels. By one-way variance analysis and discriminatory analysis sCr and CyA blood levels, FENA, urinary AF activity, and beta2MG urine level were singled out as the most powerful discriminant variables. Combination of these variables enables accurate diagnosis of AR in 94.7% of cases, and differential diagnosis of all three disorders in 84.13% of cases.

Brand Name/Manufacturer: pressimune/boehringer

Manufacturer name: boehringer

Drug Descriptors:

* cyclosporin a--adverse drug reaction--ae; *cyclosporin a--drug therapy--dt azathioprine--drug therapy--dt; creatinine--endogenous compound--ec; lymphocyte antibody--drug therapy--dt; methylprednisolone--drug therapy--dt

Medical Descriptors:

* graft rejection--drug therapy--dt; *kidney transplantation; *nephrotoxicity --side effect--si

adult; article; clinical article; diuresis; enzyme activity; female; human; intravenous drug administration; kidney tubule necrosis; male; oral drug administration

CAS Registry Number: 446-86-6 (azathioprine); 19230-81-0, 60-27-5 (creatinine); 59865-13-3, 63798-73-2 (cyclosporin A); 6923-42-8, 83-43-2 (methylprednisolone)

SECTION HEADINGS:

Immunology, Serology and Transplantation Urology and Nephrology Drug Literature Index Adverse Reactions Titles

Dialog eLink:

7/5/60 (Item 8 from file: 72) DIALOG(R)File 72: EMBASE

(c) 2010 Elsevier B.V. All rights reserved.

0075637957 **EMBASE/MEDLINE No:** 1994063591

Changes of urinary beta-2-microglobulin after renal transplantation [1]

Simic-Ogrizovic S.; Djukanovic L.; Golubovic M.

Department of Nephrology, Institute of Urology and Nephrology, Pasterova 2, 11000 Belgrade, Yugoslavia

Corresp. Author/Affil: Simic-Ogrizovic S.: Department of Nephrology, Institute of Urology and Nephrology, Pasterova 2, 11000 Belgrade, Yugoslavia

Nephron (NEPHRON) (Switzerland) March 1, 1994, 66/3 (354-355)

CODEN: NPRNA ISSN: 0028-2766

Document Type: Journal; Letter **Record Type:** Citation

Language: English Drug Descriptors:

azathioprine--drug combination--cb; beta 2 microglobulin--endogenous compound--ec; creatine--endogenous compound--ec; cyclosporin a--adverse drug reaction--ae; cyclosporin a--drug combination--cb; prednisolone--drug combination--cb

Medical Descriptors:

* beta 2 microglobulin urine level; *kidney transplantation adult; clinical article; creatinine blood level; echography; female; haplotype; histopathology; human; immunosuppressive treatment; kidney graft rejection-complication-co; kidney graft rejection-diagnosis-di; kidney graft rejection-etiology-et; kidney tubule necrosis-complication-co; letter; male; nephrotoxicity-side effect-si; priority journal; twins

CAS Registry Number: 446-86-6 (azathioprine); 9066-69-7 (beta 2 microglobulin); 57-00-1 (creatine); 59865-13-3, 63798-73-2 (cyclosporin A); 50-24-8 (prednisolone) **SECTION HEADINGS:**

Urology and Nephrology Drug Literature Index Adverse Reactions Titles

Dialog eLink:

7/5/61 (Item 9 from file: 72) DIALOG(R)File 72: EMBASE

(c) 2010 Elsevier B.V. All rights reserved.

0069462071 EMBASE/MEDLINE No: 18044331

Massive GIST of the stomach--case report

Jovovic M.; Bajic P.; Golubovic M.; Dobricanin V.; Maric I. Klinicki centar Crue Gore, Hirurska klinika, Podgorica.

Corresp. Author/Affil: Jovovic M.: Klinicki centar Crue Gore, Hirurska klinika,

Podgorica.

Acta chirurgica Iugoslavica (Acta Chir Iugosl) (scg) December 1, 2007, 54/2 (127-129)

ISSN: 0354-950X

Document Type: Journal; Article Record Type: Abstract File Segment: Medline

Language: Croatian

Gastrointestinal stromal tumors (GIST) are rare mesenchimal neoplasmas of the gastrointestinal tract. The diagnosis of this tumors are oftenly very difficult. Patients with this tumor are usually addmited to the hospital cause of the gastrointestinal bleeding, abdominal pain, abdominal distension, disphagia, obstructive jaundice and bowel obsstruction. In this case report, we present a 86 year old patient with massive GIST of the stomach which was not preoperatively diagnosed.

Medical Descriptors:

* gastrointestinal stromal tumor; *stomach tumor aged; article; case report; female; human; pathology

Dialog eLink:

7/5/62 (Item 10 from file: 72) DIALOG(R)File 72: EMBASE

(c) 2010 Elsevier B.V. All rights reserved.

0069459055 **EMBASE/MEDLINE No:** 17977408

Significance of laboratory tests for differential diagnosis of acute renal allograft rejection and acute cyclosporine nephrotoxicity

Znacaj laboratorijskih testova za diferencijalnu dijagnostiku akutnog odbacivanja

transplantisanog bubrega i akutne ciklosporinske nefrotoksicnosti.

Simic-Ogrizovic S.; Djukanovic L.; Golubovic M.; DimitrijevicZ; Mimic-Oka J.; Simic T.

Corresp. Author/Affil: Simic-Ogrizovic S.

Srpski arhiv za celokupno lekarstvo (Srp Arh Celok Lek) (scg) May 1, 1994, 122/5-6 (133-136)

ISSN: 0370-8179

Document Type: Journal; Article **Record Type:** Abstract **File Segment:** Medline

Language: Croatian

The most frequent causes of renal allograft function deterioration in early postransplantation period are aucte rejection (AR) and acute cyclosporine nephotoxicity (CyA NT). In order to contribute to noninvasive diagnostics in differential diagnosis of these two disorders, glomerular and tubular function in 40 patients during 2-3 weeks after renal transplantation, were followed-up. The results showed that ischaemia, during any act of transplantation provoked functional and structural disorders of renal allografts. During acute rejection serum creatinine level was increased diuresis, sodium and beta-2 microglobulin levels were decreased, whyle there was no significant change in the urinary enzymes ativity. In acute CyA NT there was significantly greater fractional excretion of sodium and beta-2 mikroblobulin, as well as activity of N-acetly-beta-d glukosaminidase and alkaline phosphatase in urine in comparison to other examined groups.

Drug Descriptors:

* cyclosporin--adverse drug reaction--ae; *immunosuppressive agent--adverse drug reaction--ae

Medical Descriptors:

* graft rejection--diagnosis--di; *kidney disease--diagnosis--di; *kidney transplantation acute disease; adolescent; adult; article; chemically induced disorder; differential diagnosis; female; human; male

CAS Registry Number: 79217-60-0 (cyclosporin)

Dialog eLink:

7/5/63 (Item 11 from file: 72) DIALOG(R)File 72: EMBASE

(c) 2010 Elsevier B.V. All rights reserved.

0069000445 **EMBASE/MEDLINE No:** 15969506

Novel method for the production of pure glycinin from soybeans

Golubovic M.; Van Hateren S.H.; Ottens M.; Witkamp G.-J.; Van Der Wielen L.A.M. Department of Biotechnology, Delft University of Technology, Julianalaan 67, 2628 BC Delft, Netherlands

Author email: L.A.M.vanderWielen@tnw.tudelft.nl

Corresp. Author/Affil: Van Der Wielen L.A.M.: Department of Biotechnology, Delft

University of Technology, Julianalaan 67, 2628 BC Delft, Netherlands

Corresp. Author Email: L.A.M.vanderWielen@tnw.tudelft.nl

Journal of Agricultural and Food Chemistry (J. Agric. Food Chem.) (United States)

June 29, 2005, 53/13 (5265-5269) **CODEN:** JAFCA **ISSN:** 0021-8561 **Item Identifier (DOI):** 10.1021/jf0478206

Document Type: Journal; Article Record Type: Abstract File Segment: Medline

Language: English Summary language: English

Number of References: 16

A novel method for the purification of glycinin from soy meal is presented. The method is based on the isoelectric precipitation of glycinin by using carbon dioxide as a volatile precipitant. Gaseous CO SUB 2 was pressurized into the protein solution, thus lowering the pH and initiating glycinin precipitation. Pressurization and, consequently, acidification were done in a slow and controlled manner, with the end point of pH 6.4. The acidity of the protein solution was well controlled via the pressure of gaseous CO SUB 2. In this way simultaneous precipitation of other soybean proteins was prevented and very pure glycinin was obtained. Approximately 40% of the glycinin present in the protein solution was recovered with purity as high as 98%. The purification process was successfully performed on both small and large scales, without affecting glycinin purity. (c) 2005 American Chemical Society.

Drug Descriptors:

* globulin

carbon dioxide; glycinin; soybean protein

Medical Descriptors:

* soybean

article; chemistry; isolation and purification; pH; precipitation; pressure; scanning electron microscopy; solubility; ultrastructure

CAS Registry Number: 124-38-9, 58561-67-4 (carbon dioxide); 9007-93-6 (glycinin); 9010-10-0 (soybean protein)

Dialog eLink:

7/5/64 (Item 12 from file: 72) DIALOG(R)File 72: EMBASE

(c) 2010 Elsevier B.V. All rights reserved.

0068143340 **EMBASE/MEDLINE No:** 11089375

Subcutaneous pseudoaneurysm of the left ventricle--a rare complication of ischemic dilated cardiomyopathy

Supkutana pseudoaneurizma leve komore--retka komplikacija ishemijske dilatativne kardiomiopatije.

Mijatov M.; Jonjev Z.; Konstantinovic Z.; Golubovic M.; Radovanovic N. Univerzitetska klinika za kardiovaskularnu hirurgiju, Sremska Kamenica, Medicinski fakultet, Novi Sad.

Corresp. Author/Affil: Mijatov M.: Univerzitetska klinika za kardiovaskularnu hirurgiju, Sremska Kamenica, Medicinski fakultet, Novi Sad.

Medicinski pregled (Med. Pregl.) (yug) May 1, 2000, 53/5-6 (301-304)

ISSN: 0025-8105

Document Type: Journal; Article Record Type: Abstract File Segment: Medline

Language: Serbian

INTRODUCTION: Pseudoaneurysm of the heart is extremely rare in cardiology and cardiac surgery. It can be presented as a complication of myocardial infarction, cardiac trauma or surgical intervention. CASE PRESENTATION: 9 years after by-pass surgery combined with left ventricle aneurysmectomy a 69-year-old patient was admitted in hospital after full cardiologic examination. On admission, during routine chest examination 9 years after by-pass surgery combined with left ventricle aneurysmectomy, a great pulsatile mass was found in the region of left mammilla++. A left ventricle aneurysm (aneurysm per magna) was confirmed by all noninvasive and invasive tests, and new surgical aneurysmectomy was indicated. The existence of pseudoaneurysm was suspected by intraoperative transesophageal echocardiography and during the operation a false aneurysm was finally confirmed. DISCUSSION: False aneurysm develops after acute rupture of an infarcted left ventricle area. It is usually fatal, but if the adhesion or pericardial fibrosis exists and is adherent to epicardium it can create a saccular cavity (hemopericardium). Persistent communication between the left ventricle and hemopericardium can create false aneurysm of different size and shape. In more than 50% of patients false aneurysm is found accidentally. In most cases the pseudoaneurysm is asymptomatic and the treatment is surgical. CONCLUSION: False aneurysms as case presentations are very rare. Sometimes they are difficult to confirm prior to surgery; even if full diagnostic screening was arranged (including 2-D transthoracic echocardiography, transesophageal echocardiography and complete hemodynamic investigation).

Medical Descriptors:

* congestive cardiomyopathy--complication--co; *false aneurysm--diagnosis--di; *false aneurysm--etiology--et; *false aneurysm--surgery--su; *heart aneurysm--diagnosis--di; *heart aneurysm--etiology--et; *heart aneurysm --surgery--su aged; article; case report; human; male

Dialog eLink:

7/5/65 (Item 13 from file: 72) DIALOG(R)File 72: EMBASE

(c) 2010 Elsevier B.V. All rights reserved.

0068123966 **EMBASE/MEDLINE No:** 10953555

Comparison of preoperative and postoperative hemodynamic parameters in

replacement or reconstruction of the mitral valve in ischemic dilated cardiomyopathy

Uporedivanje preoperativnih i postoperativnih vrednosti hemodinamickih parametara kod zamene i rekonstrukcije mitralnog zaliska u ishemicnoj dilatativnoj kardiomiopatiji. Mijatov M.; Jonjev Z.; Konstantinovic Z.; Golubovic M.; Radovanovic N. Institut za kardiovaskularne bolesti Univerzitetska klinika za kardiovaskularnu hirurgiju, Sremska Kamenica.

Corresp. Author/Affil: Mijatov M.: Institut za kardiovaskularne bolesti Univerzitetska klinika za kardiovaskularnu hirurgiju, Sremska Kamenica.

Medicinski pregled (Med. Pregl.) (yug) January 1, 2000, 53/1-2 (68-73)

ISSN: 0025-8105

Document Type: Journal; Article Record Type: Abstract File Segment: Medline

Language: Serbian

INTRODUCTION: Ischemic mitral insufficiency is a clinical syndrome described as a consequence of the coronary artery disease where the basic problem is blood regurgitation between the left ventricle and left atrium following mitral annulus dilatation. Mitral regurgitation occurs in different degrees during the natural evolution of the ischemic heart disease. The main reason for the existence of mitral regurgitation is global deterioration in the left ventricle geometry as a consequence of myocardial infarction or/and left ventricle dilatation. Surgical correction of this problem is possible by simultaneous correction of mitral insufficiency (repair or replacement) and complete myocardial revascularisation. MATERIAL AND METHODS: Complete hemodynamic monitoring was followed by Swan-Ganz catheter including: central venous pressure, mean pulmonary artery pressure, pulmonary capillary wedge pressure, cardiac output, cardiac index and pulmonary vascular resistance. All surgical procedures were performed in extracorporeal circulation (ECC) with membrane oxygenator using moderate systemic hypothermia and transseptal surgical approach to mitral valve. Hemodynamic parameters were followed before and after ECC, immediately after surgery and during the first 48 hours after operation in the intensive care unit. In 88 patients posterior semicircular annuloplasty by N. Radovanovic was performed whereas in 13 patients mitral valve replacement was done. RESULTS: There is a great, statistically significant hemodynamic improvement after the surgical procedure and during the continuous 48 hours monitoring in the intensive care unit no matter if mitral repair or replacement was done. No statistically significant difference was recorded between these two groups considering that the hemodynamic improvement is very similar. DISCUSSION: Simultaneous surgical procedures, including myocardial revascularization, mitral and usually consecutive tricuspid insufficiency correction, are a very common surgical problem with higher operative risk than isolated coronary bypass procedures. In 88 cases where mitral reconstruction was possible, posterior semicircular reductive annuloplasty was performed. Thus mitral annulus area reduction is achieved preserving its physiologic shape and avoiding rigidity. Mitral valve replacement includes implantation of the latest generation of bileaflet valve prosthesis and operative technique that preserves subvalvular apparatus to maintain myocardial contractility as much as possible. This policy and also

good immediate postoperative care, improve the hemodynamic status in both groups. CONCLUSION: All hemodynamic parameters followed by ECC and 48 hours in the intensive care unit were significantly improved no matter whether mitral reconstruction or replacement was done. There is no statistically significant difference in hemodynamic parameters and clinical improvement between these two groups. Carefully chosen operative tactic and techniques as well as good preoperative and postoperative care may explain these very good results.

Medical Descriptors:

* congestive cardiomyopathy--complication--co; *congestive cardiomyopathy --surgery-su; *heart muscle ischemia--complication--co; *hemodynamics; * mitral valve--surgery-su; *mitral valve regurgitation--surgery--su article; comparative study; female; heart muscle revascularization; heart valve replacement; human; male; middle aged; pathophysiology

Dialog eLink:

7/5/66 (Item 14 from file: 72) DIALOG(R)File 72: EMBASE (c) 2010 Elsevier B.V. All rights reserved.

0067960203 **EMBASE/MEDLINE No:** 10352502

Diagnostic importance of fibronectin in chronic liver diseases

Dijagnosticki znacaj fibronektina u hronicnim bolestima jetre.

Golubovic M.; Majkic-Singh N.; Markovic S.; Sumarac Z.; Obradovic I.

Institut za medicinsku biohemiju, Klinicki centar Srbije, Beograd.

Corresp. Author/Affil: Golubovic M.: Institut za medicinsku biohemiju, Klinicki centar Srbije, Beograd.

Medicinski pregled (Med. Pregl.) (yug) January 1, 1999, 52/1-2 (35-38)

ISSN: 0025-8105

Document Type: Journal; Article Record Type: Abstract File Segment: Medline

Language: Serbian

Plasma fibronectin was determined in 29 patients with decompensated cirrhosis (7 patients had bacterial infection) and 23 patients with malignant liver disease. The obtained values were compared with the fibronectin values in 20 healthy subjects belonging to the control group in order to determine the possible diagnostic value of this dimer glycoprotein of high molecular weight whose role in the organism has not been completely explained. Fibronectin was determined on nephelometer with the use of specific antiserum by Behringwerke. The results expressed as mean values and SD were compared with monofactorial variance analysis (method One-way ANOVA). Fibronectin values in patients with liver cirrhosis were statistically significantly lower than in the control group (p < 0.01), which is also the case with correlation with malignant liver disease (p < 0.01). The fibronectin values in patients with malignant diseases were almost

the same as the control group values (p < 0.01). In 7 patients with liver cirrhosis and bacterial infection the fibronectin values were statistically significantly higher in relation to those in the remaining 22 patients with cirrhosis but without bacterial infection (p < 0.001). The investigation in this study indicated that the decrease of mean fibronectin values is related to hepatic failure which is of diagnostic value, while normal values in malignant diseases do not favor the opinion on fibronectin as a tumor marker. Higher fibronectin values in infection in patients with liver cirrhosis are not clear, which indicated the total complexity of the relation between fibronectin as a dimer glycoprotein and chronic liver diseases including malignant.

Drug Descriptors:

* fibronectin

biological marker

Medical Descriptors:

* liver cirrhosis--complication--co; *liver cirrhosis--diagnosis--di; *liver tumor--diagnosis--di

article; bacterial infection--complication--co; blood; chronic disease; female; human; male; middle aged

CAS Registry Number: 86088-83-7 (fibronectin)

Dialog eLink:

7/5/67 (Item 1 from file: 73) DIALOG(R)File 73: EMBASE

(c) 2010 Elsevier B.V. All rights reserved.

0083802408 **EMBASE/MEDLINE No:** 20162031

Laryngeal adenoid cystic carcinoma

Carcinoma adenoidocistico della laringe

Zvrko E.; Golubovic M.

Clinic for Otorhinolaryngology and Maxillofacial Surgery, Podgorica, Montenegro

Author email: elvirz@t-com.me

Corresp. Author/Affil: Zvrko E.: Klinika za ORL i MFH, Ljubljanska bb, 81000

Podgorica, Montenegro

Corresp. Author Email: elvirz@t-com.me

Acta Otorhinolaryngologica Italica (Acta Otorhinolaryngol. Ital.) (Italy) October 1, 2009, 29/5 (279-282)

CODEN: AOITD ISSN: 0392-100X eISSN: 1827-675X URL: http://www.actaitalica.it/issues/2009/5-09/Zvrko.pdf

Document Type: Journal; Article Record Type: Abstract File Segment: Medline

Language: Italian Summary language: English; Italian

Number of References: 12

Adenoid cystic carcinomas are malignant tumours and occur in the major and the minor

salivary glands. Laryngeal adenoid cystic carcinomas are rare and account for less than 1% of all malignant tumours in the larynx. Adenoid cystic carcinoma is characterised by slow progression, multiple recurrences and late distant metastasis. The aetiology of adenoid cystic carcinoma remains unknown. They usually originate in the supraglottic or subglottic area. Wide-margin surgery alone or in combination with post-operative radiotherapy is the best tumour management. In this article, the case of laryngeal adenoid cystic carcinoma is described in a 55-year-old male patient who presented with a 3-month history of prelaryngeal pain. The patient underwent total laryngectomy and post-operative radiotherapy. For patients with laryngeal adenoid cystic carcinomas, regular and long-term follow-up is mandatory, in order to detect relapses and metastases.

Medical Descriptors:

* adenoid cystic carcinoma--surgery--su; *larynx tumor--surgery--su article; biopsy; case report; computer assisted tomography; human; laryngectomy; male; middle aged; pathology; radiography

Dialog eLink:

7/5/68 (Item 2 from file: 73) DIALOG(R)File 73: EMBASE

(c) 2010 Elsevier B.V. All rights reserved.

0083542982 EMBASE/MEDLINE No: 2010083268

Correlation between disease progression and histopathologic criterions of the lip squamous cell carcinoma

Povezanost histopatoloskih karakteristika karcinoma usne sa progresijom bolesti

Golubovic M.; Asanin B.; Jelovac D.; Petrovic M.; Antunovic M.

Medicinski Fakultet, Klinicki Centar Crne Gore, Centar za Patologiju I Sudsku Medicinu, Podgorica, Croatia

Author email: miletagol@t-com.me

Corresp. Author/Affil: Golubovic M.: Medicinski Fakultet, Klinicki Centar Crne Gore,

Centar za Patologiju I Sudsku Medicinu, Podgorica, Croatia

Corresp. Author Email: miletagol@t-com.me

Vojnosanitetski Pregled (Vojnosanit. Pregl.) (Serbia) January 1, 2010, 67/1 (19-24)

CODEN: VSPRA **ISSN:** 0042-8450

URL: http://www.vma.mod.gov.rs/vsp/download/vsp_01_10.pdf
Document Type: Journal; Article Record Type: Abstract
Language: Croatian Summary language: English; Croatian

Number of References: 33

Background/Aim. The most common malignancy of the lip is squamous cell carcinoma (SCC). In our population, according to epidemiological data, almost a half of all (45%) SCC of oral mucous tissue spreads over the lower and upper lip. The aim of this study was to estimate prognostic importance of histopathologic characteristics - histologic

grade, nuclear grade and tumor size in relation to the appearance of lymph node metastases and relapse in SCC of the lip. Methods. In the retrospective-prospective study 70 cases of lower and upper lip SCC were analyzed. They were diagnosed from 2002 to 2006 in the Clinic of Maxillofacial Surgery, Clinical Center of Montenegro. The data about localization of the carcinomas, histopathologic characteristics and lymph node status were taken from medical files of the patients. The patients were followed up in a 3year period and the disease relapse or/and metastatic disease appearance were registereds. Results. There was statistically significant difference in tumor size among the patients with and without disease relapse (p = 0.027). Logistic regression analysis showed that the tumor size is a statistically significant factor (R = 0.186; p = 0.011) for the appearance of regional lymph node metastases. Relative risk [exp (B)] for the appearance of regional lymph node metastases in relation to tumor size was 2.807. Conclusion. Histologic and nuclear grade of lip SCC are not prognostic factors for the appearance of the disease relapse and regional lymph node metastases. Tumor size is a predictive factor of the relapse appearance, as well as for lymph node metastases appearance. In clinical practice, tumor size is a factor that classifies patients with lip SCC into the groups of higher and smaller risk of relapse appearance and for lymph node metastases appearance. Our results suggest that, risk for lymph node metastases appearance increases 2.8 times with increasing of the tumor size over 2 cm in diameter.

Medical Descriptors:

* lip carcinoma--diagnosis--di; *lip carcinoma--surgery--su; *squamous cell carcinoma--diagnosis--di; *squamous cell carcinoma--surgery--su adult; aged; article; cancer diagnosis; cancer grading; cancer patient; cancer relapse; cancer size; cancer surgery; clinical feature; clinical practice; disease classification; disease course; epidemiological data; female; follow up; histopathology; human; human tissue; lymph node metastasis; major clinical study; male; maxillofacial surgery; retrospective study; tumor volume; upper lip

SECTION HEADINGS:

General Pathology and Pathological Anatomy Otorhinolaryngology Cancer Public Health, Social Medicine and Epidemiology

Dialog eLink:

7/5/69 (Item 3 from file: 73) DIALOG(R)File 73: EMBASE (c) 2010 Elsevier B.V. All rights reserved.

0083322644 **EMBASE/MEDLINE No:** 2009559973

Rare type of quadricuspid aortic valve requiring surgical replacement

Susak S.; Torbica V.; Velicki L.; Golubovic M. Clinic for Cardiovascular Surgery, Institute of Cardiovascular Diseases of Vojvodina, Pecka 14 Novi, Sad 21000, Serbia Author email: velar@sbb.rs

Corresp. Author/Affil: Velicki L.: Clinic for Cardiovascular Surgery, Institute of

Cardiovascular Diseases of Vojvodina, Pecka 14 Novi, Sad 21000, Serbia

Corresp. Author Email: velar@sbb.rs

Thoracic and Cardiovascular Surgeon (Thorac, Cardiovasc, Surg.) (Germany)

November 25, 2009, 57/6 (364-366)

CODEN: TVCHA ISSN: 0171-6425 eISSN: 1439-1902

Item Identifier (DOI): 10.1055/s-0029-1185563

Document Type: Journal; Article Record Type: Abstract

Language: English Summary language: English

Number of References: 8

Quadricuspid aortic valve, a rare congenital anomaly, is often related to severe aortic regurgitation and has a significant morbidity, The first described case was reported in 1862, Quadricuspid aortic valve is, in most cases, an isolated malformation, but it can be associated with other concomitant anomalies, We present here the case of a quadricuspid aortic valve discovered by intraoperative transesophageal echocardiography and successfully replaced with a mechanical aortic valve, Heart valve surgery, heart disease, cardiovascular surgery. (c) Georg Thieme Verlag KG Stuttgart New York.

Medical Descriptors:

* aorta anomaly--diagnosis--di; *aorta anomaly--surgery--su adult; anamnesis; aorta valve replacement; article; case report; clinical feature; human; male; physical examination; priority journal; transesophageal echocardiography; transthoracic echocardiography

Medical Terms (Uncontrolled): quadricuspid aortic valve--diagnosis--di; quadricuspid aortic valve --surgery--su

SECTION HEADINGS:

Cardiovascular Diseases and Cardiovascular Surgery

Dialog eLink:

7/5/70 (Item 4 from file: 73) DIALOG(R)File 73: EMBASE

(c) 2010 Elsevier B.V. All rights reserved.

0082180496 **EMBASE/MEDLINE No:** 2007594160

HER-2/neu overexpression in invasive ductal breast cancer - An association with other prognostic and predictive factors

Ivkovic-Kapicl T.; Knezevic-Usaj S.; Panjkovic M.; Dilas-Ivanovic D.; Golubovic M. Oncology Institute of Vojvodina, Sremska Kamenica, Serbia; Institutski put 4, 21204 Sremska Kamenica, Serbia

Author email: kapicl@Eunet.yu

Corresp. Author/Affil: Ivkovic-Kapicl T.: Oncology Institute of Vojvodina, Sremska

Kamenica, Serbia

Corresp. Author Email: kapicl@Eunet.yu

Archive of Oncology (Arch. Oncol.) (Serbia) July 1, 2007, 15/1-2 (15-18)

CODEN: ARONF **ISSN:** 0354-7310

Item Identifier (DOI): <u>10.2298/AOO0702015I</u>

Document Type: Journal; Article Record Type: Abstract

Language: English Summary language: English

Number of References: 32

Background: HER-2/neu is a proto-oncogene that is amplified/overexpressed in 15 to 30% of invasive breast cancers. The purpose of this study was to determine if any relationship exist between HER-2/neu protein overexpression and estrogen receptor (ER), progesterone receptor (PR), grade, size, and lymph node status in female breast cancer. Methods: A total of 100 cases of invasive ductal breast cancer were included in this study. The hormone receptors and HER-2/neu were studied immunohistochemically (IHC). Using the HER-2/neu DAKO scoring system, scores of 0, 1+ and 2+ were defined as negative and 3+ as positive. Results: HER-2/neu protein overexpression was seen in 20 (20%) of cases. HER-2/neu protein overexpression was present in 4 of 52 T1 lesions (8%), in 11 of 37 T2 lesions (30%), in 3 of 6 T3 lesions (50%), and in 2 of 5 T4 lesions (40%), (p<0.05). Protein overexpression was seen in 7 of 17 grade III tumors (41%), and 13 of 61 grade II tumors (21%). Overexpression was not detected in grade I tumors (p<0.01). Of the 20 Her-2/neu positive cases, ER- and PR-negative status was detected in 60% and 70%, respectively. Conclusion: Statistically significant correlation was found between HER-2/neu protein overexpression and large tumor size, high histological grade, and ER-, PR-negativity. There was no correlation with lymphonodal status. (c) 2007, Oncology Institute of Vojvodina.

Drug Descriptors:

* epidermal growth factor receptor 2--endogenous compound--ec estrogen receptor--endogenous compound--ec; hormone receptor--endogenous compound--ec

Medical Descriptors:

* breast cancer--diagnosis--di; *breast cancer--etiology--et article; cancer diagnosis; cancer invasion; correlation analysis; disease association; female; gene overexpression; histopathology; human; human tissue; immunohistochemistry; major clinical study; prognosis; scoring system; statistical significance; tumor volume

CAS Registry Number: 137632-09-8 (epidermal growth factor receptor 2) **SECTION HEADINGS:**

Cancer

Human Genetics

Endocrinology

General Pathology and Pathological Anatomy

Dialog eLink:

7/5/71 (Item 5 from file: 73)
DIALOG(R)File 73: EMBASE
(c) 2010 Elsevier B.V. All rights reserved.

0082175699 **EMBASE/MEDLINE No:** 2007589309

A method for lipase co-precipitation in a biodegradable protein matrix

Golubovic M.; Van Hateren S.H.; Ottens M.; Witkamp G.J.; Van Der Wielen L.A.M. Delft University of Technology, Department of Biotechnology, Julianalaan 67, 2628 BC Delft, Netherlands

Author email: m.ottens@tudelft.nl

Corresp. Author/Affil: Ottens M.: Delft University of Technology, Department of

Biotechnology, Julianalaan 67, 2628 BC Delft, Netherlands

Corresp. Author Email: m.ottens@tudelft.nl

Biotechnology and Bioengineering (Biotechnol. Bioeng.) (United States) December 15, 2007, 98/6 (1209-1218)

CODEN: BIBIA ISSN: 0006-3592 eISSN: 1097-0290

Item Identifier (DOI): 10.1002/bit.21499

Document Type: Journal; Article Record Type: Abstract

Language: English Summary language: English

Number of References: 37

This article presents a novel method for immobilization of active ingredients. The method is based on CO SUB 2 aided active ingredient co-precipitation with glycinin, a biodegradable protein matrix from edible soybean protein. Glycinin precipitates abundantly under isoelectric conditions and serves as the matrix within which the active substance is trapped during the precipitation process. The enzyme lipase from Candida rugosa was successfully co-precipitated into the protein pellet to prove the principle. It was shown that the lipase within the co-precipitate retained lipase and esterase activity under different pH conditions. In some cases the activity was even higher than the activity of crude lipase, possibly due to the protective role of the matrix protein. Due to the retained lipase activity and food-grade quality of the binary precipitate, it has potential of being used in the food or pharmaceutical industry. Additional quality of the binary precipitate is the potentially significantly reduced downstream processing due to the fact that no organic solvents or precipitants were used in the precipitation process. (c) 2007 Wiley Periodicals, Inc.

Drug Descriptors:

* matrix protein--endogenous compound--ec; *triacylglycerol lipase --endogenous compound--ec

glycinin--endogenous compound--ec; triacetin

Medical Descriptors:

amino acid sequence; article; biodegradability; Candida rugosa; controlled study; enzyme immobilization; Michaelis Menten kinetics; nonhuman; precipitation; protein analysis;

protein interaction

CAS Registry Number: 9007-93-6 (glycinin); 102-76-1 (triacetin); 9001-62-1

(triacylglycerol lipase) **SECTION HEADINGS:**

Clinical and Experimental Biochemistry

Dialog eLink:

7/5/72 (Item 6 from file: 73) DIALOG(R)File 73: EMBASE

(c) 2010 Elsevier B.V. All rights reserved.

0080227016 **EMBASE/MEDLINE No:** 2004406362

Preparation, optimization, and structures, of cross-linked enzyme aggregates (CLEAs)

Schoevaart R.; Wolbers M.W.; Golubovic M.; Ottens M.; Kieboom A.P.G.; Van Rantwijk F.; Van Der Wielen L.A.M.; Sheldon R.A.

Biocatalysis and Organic Chemistry, Department of Biotechnology, Delft University of Technology, Julianalaan 136, 2628 BL Delft, Netherlands; Industrial Fermentative Chemistry, Leiden University, P.O. Box 9502, 2300 RA Leiden, Netherlands

Author email: r.a.sheldon@tnw.tudelft.nl

Corresp. Author/Affil: Sheldon R.A.: Biocatalysis and Organic Chemistry, Department of Biotechnology, Delft University of Technology, Julianalaan 136, 2628 BL Delft, Netherlands

Corresp. Author Email: r.a.sheldon@tnw.tudelft.nl

Biotechnology and Bioengineering (Biotechnol, Bioeng.) (United States) September 20, 2004, 87/6 (754-762)

CODEN: BIBIA **ISSN:** 0006-3592 **Item Identifier (DOI):** <u>10.1002/bit.20184</u>

Document Type: Journal; Article Record Type: Abstract

Language: English Summary language: English

Number of References: 23

The broad applicability of the cross-linking of enzyme aggregates to the effective immobilisation of enzymes is demonstrated and the influence of many parameters on the properties of the resulting CLEAs is determined. The relative simplicity of the operation ideally lends itself to high-throughput methodologies. The aggregation method was improved up to 100% activity yield for any enzyme. For the first time, the physical structures of CLEAs are elucidated. (c) 2004 Wiley Periodicals, Inc.

Medical Descriptors:

* cross linking; *enzyme isolation; *enzyme structure; *protein aggregation article; enzyme activity; enzyme immobilization; high throughput screening; technique **SECTION HEADINGS:**

Clinical and Experimental Biochemistry

Dialog eLink:

7/5/73 (Item 7 from file: 73) DIALOG(R)File 73: EMBASE (c) 2010 Elsevier B.V. All rights reserved.

0075805476 **EMBASE/MEDLINE No:** 1994216893

Laboratory analyses for non-invasive diagnosis of early kidney graft disorders

Simic-Ogrizovic S.; Dukanovic L.; Golubovic M.; Bogdanovic G.; Zarkovic M.; Micic-Oka J.; Simic T.

Institute of Urology and Nephrology, Department of Nephrology, Clinical Centre of Serbia, Pasterova 2, 11000 Belgrade, Yugoslavia

Corresp. Author/Affil: Simic-Ogrizovic S.: Institute of Urology and Nephrology, Department of Nephrology, Clinical Centre of Serbia, Pasterova 2, 11000 Belgrade, Yugoslavia

Jugoslovenska Medicinska Biokemija (JUGOSL. MED. BIOKEM.) (Yugoslavia) August 9, 1994, 13/1-2 (31-35)

CODEN: JMBIE ISSN: 0352-1311

Document Type: Journal; Article **Record Type:** Abstract **Language:** English **Summary language:** English; Serbian

The most frequent causes leading to kidney graft dysfunction in the early posttransplant period are acute rejection (AR), acute cyclosporin nephrotoxicity (CyAN) and acute tubular necrosis (ATN). The purpose of the paper was to determine by which laboratory analysis or the combination of several of them, AR may be most accurately differentiated from CyAN and ATN. In 50 patients, which were observed within the first 3 weeks after kidney transplantation, the following parameters were determined: cyclosporin (CyA) whole blood level, serum creatinine (sCr) and sodium levels, diuresis, urinary activities of N- acetyl-beta-D-glucosaminidase (NAG), alkaline phosphatase (AF), glutation-S-transferase (GST) then beta-2-microglobulin (beta2MG) and sodium (UNa) urine levels. By one-way variance analysis and discriminatory analysis sCr and CyA blood levels, FENA, urinary AF activity, and beta2MG urine level were singled out as the most powerful discriminant variables. Combination of these variables enables accurate diagnosis of AR in 94.7% of cases, and differential diagnosis of all three disorders in 84.13% of cases.

Brand Name/Manufacturer: pressimune/boehringer

Manufacturer name: boehringer

Drug Descriptors:

* cyclosporin a--adverse drug reaction--ae; *cyclosporin a--drug therapy--dt azathioprine--drug therapy--dt; creatinine--endogenous compound--ec; lymphocyte antibody--drug therapy--dt; methylprednisolone--drug therapy--dt

Medical Descriptors:

* graft rejection--drug therapy--dt; *kidney transplantation; *nephrotoxicity --side effect--si

adult; article; clinical article; diuresis; enzyme activity; female; human; intravenous drug administration; kidney tubule necrosis; male; oral drug administration

CAS Registry Number: 446-86-6 (azathioprine); 19230-81-0, 60-27-5 (creatinine); 59865-13-3, 63798-73-2 (cyclosporin A); 6923-42-8, 83-43-2 (methylprednisolone)

SECTION HEADINGS:

Immunology, Serology and Transplantation Urology and Nephrology Drug Literature Index Adverse Reactions Titles

Dialog eLink:

7/5/74 (Item 8 from file: 73) DIALOG(R)File 73: EMBASE

(c) 2010 Elsevier B.V. All rights reserved.

0075637957 **EMBASE/MEDLINE No:** 1994063591

Changes of urinary beta-2-microglobulin after renal transplantation [1]

Simic-Ogrizovic S.; Djukanovic L.; Golubovic M.

Department of Nephrology, Institute of Urology and Nephrology, Pasterova 2, 11000 Belgrade, Yugoslavia

Corresp. Author/Affil: Simic-Ogrizovic S.: Department of Nephrology, Institute of Urology and Nephrology, Pasterova 2, 11000 Belgrade, Yugoslavia

Nephron (NEPHRON) (Switzerland) March 1, 1994, 66/3 (354-355)

CODEN: NPRNA ISSN: 0028-2766

Document Type: Journal; Letter **Record Type:** Citation

Language: English Drug Descriptors:

azathioprine--drug combination--cb; beta 2 microglobulin--endogenous compound--ec; creatine--endogenous compound--ec; cyclosporin a--adverse drug reaction--ae; cyclosporin a--drug combination--cb; prednisolone--drug combination--cb

Medical Descriptors:

* beta 2 microglobulin urine level; *kidney transplantation adult; clinical article; creatinine blood level; echography; female; haplotype; histopathology; human; immunosuppressive treatment; kidney graft rejection-complication-co; kidney graft rejection-diagnosis-di; kidney graft rejection-etiology-et; kidney tubule necrosis-complication-co; letter; male; nephrotoxicity-side effect-si; priority journal; twins

CAS Registry Number: 446-86-6 (azathioprine); 9066-69-7 (beta 2 microglobulin); 57-00-1 (creatine); 59865-13-3, 63798-73-2 (cyclosporin A); 50-24-8 (prednisolone) **SECTION HEADINGS:**

Urology and Nephrology Drug Literature Index Adverse Reactions Titles

Dialog eLink:

7/5/75 (Item 9 from file: 73) DIALOG(R)File 73: EMBASE (c) 2010 Elsevier B.V. All rights reserved.

0069462071 **EMBASE/MEDLINE No:** 18044331

Massive GIST of the stomach--case report

Jovovic M.; Bajic P.; Golubovic M.; Dobricanin V.; Maric I. Klinicki centar Crue Gore, Hirurska klinika, Podgorica.

Corresp. Author/Affil: Jovovic M.: Klinicki centar Crue Gore, Hirurska klinika,

Podgorica.

Acta chirurgica Iugoslavica (Acta Chir Iugosl) (scg) December 1, 2007, 54/2 (127-129)

ISSN: 0354-950X

Document Type: Journal; Article Record Type: Abstract File Segment: Medline

Language: Croatian

Gastrointestinal stromal tumors (GIST) are rare mesenchimal neoplasmas of the gastrointestinal tract. The diagnosis of this tumors are oftenly very difficult. Patients with this tumor are usually addmited to the hospital cause of the gastrointestinal bleeding, abdominal pain, abdominal distension, disphagia, obstructive jaundice and bowel obsstruction. In this case report, we present a 86 year old patient with massive GIST of the stomach which was not preoperatively diagnosed.

Medical Descriptors:

* gastrointestinal stromal tumor; *stomach tumor aged; article; case report; female; human; pathology

Dialog eLink:

7/5/76 (Item 10 from file: 73) DIALOG(R)File 73: EMBASE (c) 2010 Elsevier B.V. All rights reserved.

0069459055 **EMBASE/MEDLINE No:** 17977408

Significance of laboratory tests for differential diagnosis of acute renal allograft rejection and acute cyclosporine nephrotoxicity

Znacaj laboratorijskih testova za diferencijalnu dijagnostiku akutnog odbacivanja

transplantisanog bubrega i akutne ciklosporinske nefrotoksicnosti.

Simic-Ogrizovic S.; Djukanovic L.; Golubovic M.; DimitrijevicZ; Mimic-Oka J.; Simic T.

Corresp. Author/Affil: Simic-Ogrizovic S.

Srpski arhiv za celokupno lekarstvo (Srp Arh Celok Lek) (scg) May 1, 1994, 122/5-6 (133-136)

ISSN: 0370-8179

Document Type: Journal; Article **Record Type:** Abstract **File Segment:** Medline

Language: Croatian

The most frequent causes of renal allograft function deterioration in early postransplantation period are aucte rejection (AR) and acute cyclosporine nephotoxicity (CyA NT). In order to contribute to noninvasive diagnostics in differential diagnosis of these two disorders, glomerular and tubular function in 40 patients during 2-3 weeks after renal transplantation, were followed-up. The results showed that ischaemia, during any act of transplantation provoked functional and structural disorders of renal allografts. During acute rejection serum creatinine level was increased diuresis, sodium and beta-2 microglobulin levels were decreased, whyle there was no significant change in the urinary enzymes ativity. In acute CyA NT there was significantly greater fractional excretion of sodium and beta-2 mikroblobulin, as well as activity of N-acetly-beta-d glukosaminidase and alkaline phosphatase in urine in comparison to other examined groups.

Drug Descriptors:

* cyclosporin--adverse drug reaction--ae; *immunosuppressive agent--adverse drug reaction--ae

Medical Descriptors:

* graft rejection--diagnosis--di; *kidney disease--diagnosis--di; *kidney transplantation acute disease; adolescent; adult; article; chemically induced disorder; differential diagnosis; female; human; male

CAS Registry Number: 79217-60-0 (cyclosporin)

Dialog eLink:

7/5/77 (Item 11 from file: 73) DIALOG(R)File 73: EMBASE

(c) 2010 Elsevier B.V. All rights reserved.

0069000445 **EMBASE/MEDLINE No:** 15969506

Novel method for the production of pure glycinin from soybeans

Golubovic M.; Van Hateren S.H.; Ottens M.; Witkamp G.-J.; Van Der Wielen L.A.M. Department of Biotechnology, Delft University of Technology, Julianalaan 67, 2628 BC Delft, Netherlands

Author email: L.A.M.vanderWielen@tnw.tudelft.nl

Corresp. Author/Affil: Van Der Wielen L.A.M.: Department of Biotechnology, Delft

University of Technology, Julianalaan 67, 2628 BC Delft, Netherlands

Corresp. Author Email: L.A.M.vanderWielen@tnw.tudelft.nl

Journal of Agricultural and Food Chemistry (J. Agric. Food Chem.) (United States)

June 29, 2005, 53/13 (5265-5269) **CODEN:** JAFCA **ISSN:** 0021-8561 **Item Identifier (DOI):** 10.1021/jf0478206

Document Type: Journal; Article Record Type: Abstract File Segment: Medline

Language: English Summary language: English

Number of References: 16

A novel method for the purification of glycinin from soy meal is presented. The method is based on the isoelectric precipitation of glycinin by using carbon dioxide as a volatile precipitant. Gaseous CO SUB 2 was pressurized into the protein solution, thus lowering the pH and initiating glycinin precipitation. Pressurization and, consequently, acidification were done in a slow and controlled manner, with the end point of pH 6.4. The acidity of the protein solution was well controlled via the pressure of gaseous CO SUB 2. In this way simultaneous precipitation of other soybean proteins was prevented and very pure glycinin was obtained. Approximately 40% of the glycinin present in the protein solution was recovered with purity as high as 98%. The purification process was successfully performed on both small and large scales, without affecting glycinin purity. (c) 2005 American Chemical Society.

Drug Descriptors:

* globulin

carbon dioxide; glycinin; soybean protein

Medical Descriptors:

* soybean

article; chemistry; isolation and purification; pH; precipitation; pressure; scanning electron microscopy; solubility; ultrastructure

CAS Registry Number: 124-38-9, 58561-67-4 (carbon dioxide); 9007-93-6 (glycinin); 9010-10-0 (soybean protein)

Dialog eLink:

7/5/78 (Item 12 from file: 73) DIALOG(R)File 73: EMBASE

(c) 2010 Elsevier B.V. All rights reserved.

0068143340 **EMBASE/MEDLINE No:** 11089375

Subcutaneous pseudoaneurysm of the left ventricle--a rare complication of ischemic dilated cardiomyopathy

Supkutana pseudoaneurizma leve komore--retka komplikacija ishemijske dilatativne kardiomiopatije.

Mijatov M.; Jonjev Z.; Konstantinovic Z.; Golubovic M.; Radovanovic N. Univerzitetska klinika za kardiovaskularnu hirurgiju, Sremska Kamenica, Medicinski fakultet, Novi Sad.

Corresp. Author/Affil: Mijatov M.: Univerzitetska klinika za kardiovaskularnu hirurgiju, Sremska Kamenica, Medicinski fakultet, Novi Sad.

Medicinski pregled (Med. Pregl.) (yug) May 1, 2000, 53/5-6 (301-304)

ISSN: 0025-8105

Document Type: Journal; Article **Record Type:** Abstract **File Segment:** Medline

Language: Serbian

INTRODUCTION: Pseudoaneurysm of the heart is extremely rare in cardiology and cardiac surgery. It can be presented as a complication of myocardial infarction, cardiac trauma or surgical intervention. CASE PRESENTATION: 9 years after by-pass surgery combined with left ventricle aneurysmectomy a 69-year-old patient was admitted in hospital after full cardiologic examination. On admission, during routine chest examination 9 years after by-pass surgery combined with left ventricle aneurysmectomy, a great pulsatile mass was found in the region of left mammilla++. A left ventricle aneurysm (aneurysm per magna) was confirmed by all noninvasive and invasive tests, and new surgical aneurysmectomy was indicated. The existence of pseudoaneurysm was suspected by intraoperative transesophageal echocardiography and during the operation a false aneurysm was finally confirmed. DISCUSSION: False aneurysm develops after acute rupture of an infarcted left ventricle area. It is usually fatal, but if the adhesion or pericardial fibrosis exists and is adherent to epicardium it can create a saccular cavity (hemopericardium). Persistent communication between the left ventricle and hemopericardium can create false aneurysm of different size and shape. In more than 50% of patients false aneurysm is found accidentally. In most cases the pseudoaneurysm is asymptomatic and the treatment is surgical. CONCLUSION: False aneurysms as case presentations are very rare. Sometimes they are difficult to confirm prior to surgery; even if full diagnostic screening was arranged (including 2-D transthoracic echocardiography, transesophageal echocardiography and complete hemodynamic investigation).

Medical Descriptors:

* congestive cardiomyopathy--complication--co; *false aneurysm--diagnosis--di; *false aneurysm--etiology--et; *false aneurysm--surgery--su; *heart aneurysm--diagnosis--di; *heart aneurysm--etiology--et; *heart aneurysm --surgery--su aged; article; case report; human; male

Dialog eLink:

7/5/79 (Item 13 from file: 73) DIALOG(R)File 73: EMBASE (c) 2010 Elsevier B.V. All rights reserved.

0068123966 **EMBASE/MEDLINE No:** 10953555

Comparison of preoperative and postoperative hemodynamic parameters in

replacement or reconstruction of the mitral valve in ischemic dilated cardiomyopathy

Uporedivanje preoperativnih i postoperativnih vrednosti hemodinamickih parametara kod zamene i rekonstrukcije mitralnog zaliska u ishemicnoj dilatativnoj kardiomiopatiji. Mijatov M.; Jonjev Z.; Konstantinovic Z.; Golubovic M.; Radovanovic N. Institut za kardiovaskularne bolesti Univerzitetska klinika za kardiovaskularnu hirurgiju, Sremska Kamenica.

Corresp. Author/Affil: Mijatov M.: Institut za kardiovaskularne bolesti Univerzitetska klinika za kardiovaskularnu hirurgiju, Sremska Kamenica.

Medicinski pregled (Med. Pregl.) (yug) January 1, 2000, 53/1-2 (68-73)

ISSN: 0025-8105

Document Type: Journal; Article Record Type: Abstract File Segment: Medline

Language: Serbian

INTRODUCTION: Ischemic mitral insufficiency is a clinical syndrome described as a consequence of the coronary artery disease where the basic problem is blood regurgitation between the left ventricle and left atrium following mitral annulus dilatation. Mitral regurgitation occurs in different degrees during the natural evolution of the ischemic heart disease. The main reason for the existence of mitral regurgitation is global deterioration in the left ventricle geometry as a consequence of myocardial infarction or/and left ventricle dilatation. Surgical correction of this problem is possible by simultaneous correction of mitral insufficiency (repair or replacement) and complete myocardial revascularisation. MATERIAL AND METHODS: Complete hemodynamic monitoring was followed by Swan-Ganz catheter including: central venous pressure, mean pulmonary artery pressure, pulmonary capillary wedge pressure, cardiac output, cardiac index and pulmonary vascular resistance. All surgical procedures were performed in extracorporeal circulation (ECC) with membrane oxygenator using moderate systemic hypothermia and transseptal surgical approach to mitral valve. Hemodynamic parameters were followed before and after ECC, immediately after surgery and during the first 48 hours after operation in the intensive care unit. In 88 patients posterior semicircular annuloplasty by N. Radovanovic was performed whereas in 13 patients mitral valve replacement was done. RESULTS: There is a great, statistically significant hemodynamic improvement after the surgical procedure and during the continuous 48 hours monitoring in the intensive care unit no matter if mitral repair or replacement was done. No statistically significant difference was recorded between these two groups considering that the hemodynamic improvement is very similar. DISCUSSION: Simultaneous surgical procedures, including myocardial revascularization, mitral and usually consecutive tricuspid insufficiency correction, are a very common surgical problem with higher operative risk than isolated coronary bypass procedures. In 88 cases where mitral reconstruction was possible, posterior semicircular reductive annuloplasty was performed. Thus mitral annulus area reduction is achieved preserving its physiologic shape and avoiding rigidity. Mitral valve replacement includes implantation of the latest generation of bileaflet valve prosthesis and operative technique that preserves subvalvular apparatus to maintain myocardial contractility as much as possible. This policy and also

good immediate postoperative care, improve the hemodynamic status in both groups. CONCLUSION: All hemodynamic parameters followed by ECC and 48 hours in the intensive care unit were significantly improved no matter whether mitral reconstruction or replacement was done. There is no statistically significant difference in hemodynamic parameters and clinical improvement between these two groups. Carefully chosen operative tactic and techniques as well as good preoperative and postoperative care may explain these very good results.

Medical Descriptors:

* congestive cardiomyopathy--complication--co; *congestive cardiomyopathy --surgery-su; *heart muscle ischemia--complication--co; *hemodynamics; * mitral valve--surgery-su; *mitral valve regurgitation--surgery--su article; comparative study; female; heart muscle revascularization; heart valve replacement; human; male; middle aged; pathophysiology

Dialog eLink:

7/5/80 (Item 14 from file: 73) DIALOG(R)File 73: EMBASE (c) 2010 Elsevier B.V. All rights reserved.

0067960203 EMBASE/MEDLINE No: 10352502

Diagnostic importance of fibronectin in chronic liver diseases

Dijagnosticki znacaj fibronektina u hronicnim bolestima jetre.

Golubovic M.; Majkic-Singh N.; Markovic S.; Sumarac Z.; Obradovic I.

Institut za medicinsku biohemiju, Klinicki centar Srbije, Beograd.

Corresp. Author/Affil: Golubovic M.: Institut za medicinsku biohemiju, Klinicki centar Srbije, Beograd.

Medicinski pregled (Med. Pregl.) (yug) January 1, 1999, 52/1-2 (35-38)

ISSN: 0025-8105

Document Type: Journal; Article Record Type: Abstract File Segment: Medline

Language: Serbian

Plasma fibronectin was determined in 29 patients with decompensated cirrhosis (7 patients had bacterial infection) and 23 patients with malignant liver disease. The obtained values were compared with the fibronectin values in 20 healthy subjects belonging to the control group in order to determine the possible diagnostic value of this dimer glycoprotein of high molecular weight whose role in the organism has not been completely explained. Fibronectin was determined on nephelometer with the use of specific antiserum by Behringwerke. The results expressed as mean values and SD were compared with monofactorial variance analysis (method One-way ANOVA). Fibronectin values in patients with liver cirrhosis were statistically significantly lower than in the control group (p < 0.01), which is also the case with correlation with malignant liver disease (p < 0.01). The fibronectin values in patients with malignant diseases were almost

the same as the control group values (p < 0.01). In 7 patients with liver cirrhosis and bacterial infection the fibronectin values were statistically significantly higher in relation to those in the remaining 22 patients with cirrhosis but without bacterial infection (p < 0.001). The investigation in this study indicated that the decrease of mean fibronectin values is related to hepatic failure which is of diagnostic value, while normal values in malignant diseases do not favor the opinion on fibronectin as a tumor marker. Higher fibronectin values in infection in patients with liver cirrhosis are not clear, which indicated the total complexity of the relation between fibronectin as a dimer glycoprotein and chronic liver diseases including malignant.

Drug Descriptors:

* fibronectin

biological marker

Medical Descriptors:

* liver cirrhosis--complication--co; *liver cirrhosis--diagnosis--di; *liver tumor--diagnosis--di

article; bacterial infection--complication--co; blood; chronic disease; female; human; male; middle aged

CAS Registry Number: 86088-83-7 (fibronectin)

Dialog eLink:

7/5/81 (Item 15 from file; 73) DIALOG(R)File 73: EMBASE

(c) 2010 Elsevier B.V. All rights reserved.

0066772787 **EMBASE/MEDLINE No:** 2075539

Ammoniemia in portosystemic encephalopathy--diagnostic, differential diagnostic and prognostic significance

Amoniemija u porto sistemskoj encefalopatiji-dijagnosticki, diferencijalno dijagnosticki i prognosticki znacaj.

Marisavljivic A.; Golubovic M.; Tomic D.; Krstic M.

Emergency Centre, University School of Medicine, Belgrade.

Corresp. Author/Affil: Marisavljivic A.: Emergency Centre, University School of Medicine, Belgrade.

Srpski arhiv za celokupno lekarstvo (Srp Arh Celok Lek) (yug) May 1, 1990, 118/5-6 (185-191)

ISSN: 0370-8179

Document Type: Journal; Article Record Type: Abstract File Segment: Medline

Language: Croatian

One year prospective study of 25 cirrhotic patients with portal systemic encephalopathy (PSE) admitted to the Emergency Care Centre in Belgrade was performed in order to investigate the significance of clinical, biochemical and electroencephalographic (EEG)

parameters and blood ammonia in the diagnosis, differential diagnosis and prognosis of PSE. 15 cirrhotic patients without PSE (of comparable age, sex, duration and etiology of liver cirrhosis) constituted the control group. Ammonia levels were elevated in 84% of patients with PSE (112 +/- 72 mumol/l) and reached normal range within 3 +/- 0.44 days, but with no correlation to clinical improvement (p greater than 0.1). Ammonia levels correlated with the severity of PSE (p less than 0.05), but not with other biochemical parameters (prothrombin time, bilirubin, albumin, urea, creatinine, potassium). Overall mortality was 44% and was strongly correlated (p less than 0.01) to the severity of PSE. In addition, the mortality in patients with gastrointestinal bleeding and PSE was higher (p less than 0.05), than in PSE precipitated by other conditions. We concluded that the ammonia may be a primary diagnostic parameter for PSE in the absence of the most important diagnostical methods (EEG, psychometric tests). Secondly, ammonia are of great diagnostic importance in patients with coma of unknown origin and can help in deciding admission priorities. The ammonia levels do not appear to be a useful prognostic factor.

Drug Descriptors:

* ammonia

Medical Descriptors:

* hepatic encephalopathy--diagnosis--di article; blood; differential diagnosis; electroencephalography; female; human; male; middle aged; pathophysiology; prognosis; prospective study CAS Registry Number: 14798-03-9, 51847-23-5, 7664-41-7 (ammonia)

Dialog cLink:

7/5/82 (Item 16 from file: 73) DIALOG(R)File 73: EMBASE

(c) 2010 Elsevier B.V. All rights reserved.

0066090684 **EMBASE/MEDLINE No:** 3798827

Diagnostic importance of LDH activity in the chamber fluid in intraocular tumors

Dijagnosticki znacaj aktivnosti LDH u komornoj tecnosti kod intraokularnih tumora. Golubovic M.; Ivanovic I.; Jovanovic S.

Corresp. Author/Affil: Golubovic M.

Vojnosanitetski pregled. Military-medical and pharmaceutical review (Vojnosanit Pregl) (yug) September 1, 1986, 43/5 (364-366)

ISSN: 0042-8450

Document Type: Journal; Article Record Type: Citation File Segment: Medline

Language: Croatian Drug Descriptors:

* lactate dehydrogenase--drug analysis--an

Medical Descriptors:

* aqueous humor; *enzyme assay; *eye tumor--diagnosis--di; *retinoblastoma --

diagnosis--di

article; cataract; choroid tumor--diagnosis--di; enzymology; human; melanoma--

diagnosis--di

CAS Registry Number: 9001-60-9 (lactate dehydrogenase)

Dialog eLink:

7/5/83 (Item 17 from file: 73) DIALOG(R)File 73: EMBASE

(c) 2010 Elsevier B.V. All rights reserved.

0065718398 EMBASE/MEDLINE No: 6677378 Studies on enzymatic activity in the aqueous humor

Les recherches sur l'activite enzymatique dans l'humeur aqueuse. Stanojevic-Paovic A.; Golubovic M.; Jovanovic S.; Ivanovic I.

Corresp. Author/Affil: Stanojevic-Paovic A.

Bulletins et memoires de la Societe française d'ophtalmologie (Bull Mem Soc Fr Ophtalmol) (France) December 1, 1983, 95/- (550-553)

ISSN: 0081-1092

Document Type: Journal; Article Record Type: Citation File Segment: Medline

Language: French Medical Descriptors:

* aqueous humor; *cataract article; enzymology; human

Dialog eLink:

7/5/84 (Item 18 from file: 73) DIALOG(R)File 73: EMBASE

(c) 2010 Elsevier B.V. All rights reserved.

0064401411 **EMBASE/MEDLINE No:** 4584356

Short retrospection on the history of Medimurje and the development of health services

Kratak osvrt na historiju Medimurja i razvoj zdravstvene sluzbe.

Golubovic M.

Corresp. Author/Affil: Golubovic M.

Lijecnicki vjesnik (Lijec Vjesn) (yug) August 1, 1973, 95/8 (470-473)

ISSN: 0024-3477

Document Type: Journal; Article **Record Type:** Citation **File Segment:** Medline

Language: Serbian Medical Descriptors:

* community care article; history; human; retrospective study; Yugoslavia

Dialog eLink:

7/5/85 (Item 1 from file: 144) DIALOG(R)File 144: Pascal

(c) 2010 INIST/CNRS. All rights reserved. 19560180 PASCAL No.: 10-0171273

Laryngeal adenoid cystic carcinoma

ZVRKO E; GOLUBOVIC M

Clinic for Otorhinolaryngology and Maxillofacial Surgery, Podgorica, SRB;

Center for Pathology, Clinical center of Montenegro, Podgorica, SRB Journal: Acta otorhinolaryngologica italica,

2009, 29 (5)

279-282

ISSN: 0392-100X Availability: INIST-18829;

354000181465490100

No. of Refs.: 12 ref.

Document Type: P (Serial) ; A (Analytic)

Country of Publication: Italy

Language: English Summary Language: Italian

Adenoid cystic carcinomas are malignant tumours and occur in the major

and the minor salivary glands. Laryngeal adenoid cystic carcinomas are rare

and account for less than 1% of all malignant tumours in the larynx.

Adenoid cystic carcinoma is characterised by slow progression, multiple

recurrences and late distant metastasis. The aetiology of adenoid cystic $\,$

carcinoma remains unknown. They usually originate in the supraglottic or

subglottic area. Wide-margin surgery alone or in combination with

post-operative radiotherapy is the best tumour management. In this article,

the case of laryngeal adenoid cystic carcinoma is described in a $% \left(1\right) =\left(1\right) +\left(1\right) +\left$

55-year-old male patient who presented with a 3-month history of

prelaryngeal pain. The patient underwent total laryngectomy and

post-operative radiotherapy. For patients with laryngeal adenoid cystic

carcinomas, regular and long-term follow-up is mandatory, in order to $% \left(1\right) =\left(1\right) =\left(1\right) +\left(1\right) +\left(1\right) =\left(1\right) +\left(1\right) +\left(1\right) =\left(1\right) +\left(1$

detect relapses and metastases.

English Descriptors: Larynx carcinoma; Cystic adenoid carcinoma; Malignant

tumor; Laryngectomy; Larynx; ENT; Treatment

Broad Descriptors: Cancer; Larynx disease; ENT disease; Surgery; Cancer;

Pathologie du larynx; Pathologie ORL; Chirurgie; Cancer; Laringe patologia; ORL patologia; Cirugia

French Descriptors: Carcinome du larynx; Carcinome adenoide kystique; Tumeur maligne; Laryngectomie; Larynx; ORL; Traitement

Classification Codes: 002B10B01

Copyright (c) 2010 INIST-CNRS. All rights reserved.

Dialog eLink:

7/5/86 (Item 2 from file: 144) DIALOG(R)File 144: Pascal

(c) 2010 INIST/CNRS. All rights reserved. 19113862 PASCAL No.: 09-0197138

Nanofluids and critical heat flux, experimental and analytical study 10th UK National Heat Transfer Conference, Edinburgh, Scotland, September 10-11, 2007

GOLUBOVIC M N; MADHAWA HETTIARACHCHI H D; WOREK W M; MINKOWYCZ

KEW Peter A, ed; SEFIANE Khellil, ed

Mechanical and Industrial Engineering Department, University of Illinois

at Chicago, 842 West Taylor, Chicago, IL 60607, United States School of Engineering and Physical Sciences, Heriot-Watt University, Riccarton, Edinburgh, EH14 4AS, United Kingdom; School of Engineering and

Electronics, The University of Edinburgh, Kings Buildings, Mayfield Road,

Edinburgh EH9 3JL, United Kingdom

Journal: Applied thermal engineering,

2009, 29 (7) 1281-1288

ISSN: 1359-4311 Availability: INIST-18801;

354000186777660020

No. of Refs.: 20 ref.

Document Type: P (Serial) ; A (Analytic) Country of Publication: United Kingdom

Language: English

In recent years, nanofluids have been attracting significant attention in

the heat transfer research community. These fluids are obtained by

suspending nanoparticles having sizes between 1 and 100 nm in regular $\,$

fluids. It was found by several researchers that the thermal conductivity

of these fluids can be significantly increased when compared to the same

fluids without nanoparticles. Also, it was found that pool boiling critical

heat flux increases in nanofluids. In this paper, our objective is to

evaluate the impact of different nanoparticle characteristics including $% \left(1\right) =\left(1\right) +\left(1\right) +\left($

particle concentration, size and type on critical heat flux experimentally

at saturated conditions. As a result, this work will document our

experimental findings about pool boiling critical heat flux in different

nanofluids. In addition, we will identify reasons behind the increase in

the critical heat flux and present possible approaches for analytical

modeling of critical heat flux in nanofluids at saturated conditions.

English Descriptors: Critical heat flow; Heat transfer; Nanoparticle; Thermal conductivity; Boiling; Particle size; Modeling

French Descriptors: Flux thermique critique; Transfert chaleur; Nanoparticule; Conductivite thermique; Ebullition; Dimension particule; Modelisation

Classification Codes: 001D06D02B; 230

Copyright (c) 2009 INIST-CNRS. All rights reserved.

Dialog eLink:

7/5/87 (Item 3 from file: 144) DIALOG(R)File 144: Pascal

(c) 2010 INIST/CNRS. All rights reserved. 18467211 PASCAL No.: 08-0040267

A method for lipase co-precipitation in a biodegradable protein matrix

GOLUBOVIC M; VAN HATEREN S H; OTTENS M; WITKAMP G J; VAN DER WIELEN L A M

Delft University of Technology, Department of Biotechnology, Julianalaan

 $67,\ 2628$ BC Delft, Netherlands; Delft University of Technology, Laboratory

for Process Equipment, Delft, Netherlands

Journal: Biotechnology and bioengineering,

2007, 98 (6)

1209-1218

ISSN: 0006-3592 CODEN: BIBIAU Availability: INIST-9164; 354000162123840090

No. of Refs.: 3/4 p.

Document Type: P (Serial) ; A (Analytic) Country of Publication: United States

Language: English

This article presents a novel method for immobilization of active

ingredients. The \mbox{method} is based on \mbox{CO} SUB 2 aided active ingredient

co-precipitation $% \left(1\right) =\left(1\right) +\left(1\right) +\left$

soybean protein. Glycinin precipitates abundantly under isoelectric

conditions and serves as the matrix within which the active substance is

trapped during the precipitation process. The enzyme lipase from ${\tt Candida}$

rugosa was successfully coprecipitated into the protein pellet to prove the

principle. It was shown that the lipase within the co-precipitate retained

lipase and esterase activity under different pH conditions. In some cases $% \left(1\right) =\left(1\right) +\left(1\right) +$

the activity was even higher than the activity of crude lipase, possibly

due to the protective role of the matrix protein. Due to the retained

lipase activity and food-grade quality of the binary precipitate, it has

potential of being used in the food or pharmaceutical industry. Additional

quality $\$ of the binary precipitate is the potentially significantly reduced

downstream processing due to the fact that no organic solvents or $% \left(1\right) =\left(1\right) +\left(1\right) +$

precipitants were used in the precipitation process.

English Descriptors: Method; Triacylglycerol lipase; Molecular interaction;

Protein; Immobilization; Glycinin; Coprecipitation

Broad Descriptors: Carboxylic ester hydrolases; Esterases; Hydrolases; Enzyme; Carboxylic ester hydrolases; Esterases; Hydrolases; Enzyme; Carboxylic ester hydrolases; Esterases; Hydrolases; Enzima

French Descriptors: Methode; Triacylglycerol lipase; Interaction moleculaire; Proteine; Immobilisation; Glycinine; Coprecipitation; Precipitation isoelectrique

Classification Codes: 002A31C05B; 215

Copyright (c) 2008 INIST-CNRS. All rights reserved.

Dialog eLink:

7/5/88 (Item 4 from file: 144) DIALOG(R)File 144: Pascal

(c) 2010 INIST/CNRS. All rights reserved.

17230184 PASCAL No.: 05-0301817 Novel method for the production of pure glycinin from soybeans GOLUBOVIC Marijana; VAN HATEREN Stef H; OTTENS Marcel; WITKAMP Geert-Jan; VAN DER WIELEN Luuk A M Department of Biotechnology, Delft University of Technology, Julianalaan 67, 2628 BC Delft, Netherlands; Laboratory for Process Equipment, Delft University of Technology, Leeghwaterstraat 44, 2628 CA Delft, Netherlands Journal: Journal of agricultural and food chemistry: (Print) 2005, 53 (13) 5265-5269 ISSN: 0021-8561 CODEN: JAFCAU Availability: INIST-7332; 354000138175650330 No. of Refs.: 16 ref. Document Type: P (Serial) ; A (Analytic) Country of Publication: United States Language: English A novel method for the purification of glycinin from soy meal is presented. The method is based on the isoelectric precipitation of glycinin by using carbon dioxide as a volatile precipitant. Gaseous CO SUB 2 pressurized into the protein solution, thus lowering the pH and initiating glycinin precipitation. Pressurization and, consequently, acidification were done in a slow and controlled manner, with the end point of pH 6.4. The acidity of the protein solution was well controlled via the pressure of gaseous CO SUB 2 . In this way simultaneous precipitation of other soybean proteins was prevented and very pure glycinin was obtained. Approximately 40% of the glycinin present in the protein solution was recovered with purity as high as 98%. The purification process was successfully performed on both small and large scales, without affecting glycinin purity. English Descriptors: Method; Production; Glycinin; Glycine max; Purification; Carbon dioxide; Precipitation Broad Descriptors: Plant protein; Leguminosae; Dicotyledones; Angiospermae; Spermatophyta; Storage protein; Grain legume; Proteine vegetale;

; Legumineuse grain; Proteina vegetal; Leguminosae; Dicotyledones; Angiospermae; Spermatophyta; Proteina reserva; Leguminosa grano

Leguminosae; Dicotyledones; Angiospermae; Spermatophyta; Proteine

reserve

French Descriptors: Methode; Production; Glycinine; Glycine max; Soja; Purification; Carbone dioxyde; Precipitation

Classification Codes: 002A35B14; 002A35B09

Copyright (c) 2005 INIST-CNRS. All rights reserved.

Dialog eLink:

7/5/89 (Item 5 from file: 144) DIALOG(R)File 144: Pascal

(c) 2010 INIST/CNRS. All rights reserved. 16925889 PASCAL No.: 04-0590255

Preparation, optimization, and structures of cross-linked enzyme aggregates (CLEAs)

SCHOEVAART R; WOLBERS M W; GOLUBOVIC M; OTTENS M; KIEBOOM A P G; VAN RANTWIJK F; VAN DER WIELEN L A M; SHELDON R A Biocatalysis and Organic Chemistry, Department of Biotechnology,

University of Technology, Julianalaan 136, 2628 BL Delft, Netherlands; Industrial Fermentative Chemistry, Leiden University, P. O. Box 9502, 2300

RA Leiden, Netherlands; Bioseparation Technology, Department of Biotechnology, Delft University of Technology, Julianalaan 67, 2628 BC Delft, Netherlands

Journal: Biotechnology and bioengineering,

2004, 87 (6)

754-762

ISSN: 0006-3592 CODEN: BIBIAU Availability: INIST-9164;

354000113993010070

No. of Refs.: 23 ref.

Document Type: P (Serial) ; A (Analytic) Country of Publication: United States

Language: English

effective immobilisation of enzymes is demonstrated and the influence of

many parameters on the properties of the resulting CLEAs is determined. The

relative simplicity of the operation ideally lends itself to

 $\begin{array}{ll} \text{high-throughput} & \text{methodologies.} & \text{The} & \text{aggregation method was improved} \\ \text{up to} & \end{array}$

100% activity yield for any enzyme. For the first time, the physical $% \left(1\right) =\left(1\right) +\left(1\right$

structures of CLEAs are elucidated.

English Descriptors: Optimization; Crosslinking; Enzyme;
Immobilization;
Aggregate

French Descriptors: Optimisation; Reticulation; Enzyme; Immobilisation; Agregat

Classification Codes: 002A31C05B; 215

Copyright (c) 2004 INIST-CNRS. All rights reserved.

Dialog eLink:

7/5/90 (Item 1 from file: 154)

DIALOG(R)File 154: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

33128725 **PMID:** 20162031 **Record Identifier:** PMC2821129

Laryngeal adenoid cystic carcinoma.

Zvrko E; Golubovic M

Clinic for Otorhinolaryngology and Maxillofacial Surgery, Center for Pathology, Clinical

Center of Montenegro, Podgorica, Montenegro. elvirz@t-com.me

Acta otorhinolaryngologica Italica - organo ufficiale della Societa italiana di

otorinolaringologia e chirurgia cervico-facciale (Italy) Oct 2009, 29 (5) p279-82,

ISSN: 1827-675X--Electronic 0392-100X--Linking **Journal Code:** 8213019

Publishing Model Print

Document type: Case Reports; Journal Article

Languages: ENGLISH

Main Citation Owner: NLM Other Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

Adenoid cystic carcinomas are malignant tumours and occur in the major and the minor salivary glands. Laryngeal adenoid cystic carcinomas are rare and account for less than 1% of all malignant tumours in the larynx. Adenoid cystic carcinoma is characterised by slow progression, multiple recurrences and late distant metastasis. The aetiology of adenoid cystic carcinoma remains unknown. They usually originate in the supraglottic or subglottic area. Wide-margin surgery alone or in combination with post-operative radiotherapy is the best tumour management. In this article, the case of laryngeal adenoid cystic carcinoma is described in a 55-year-old male patient who presented with a 3-month history of prelaryngeal pain. The patient underwent total laryngectomy and post-operative radiotherapy. For patients with laryngeal adenoid cystic carcinomas, regular and long-term follow-up is mandatory, in order to detect relapses and metastases.

Tags: Male

Descriptors: *Carcinoma, Adenoid Cystic--pathology--PA; *Carcinoma, Adenoid Cystic--surgery--SU; *Laryngeal Neoplasms--pathology--PA; *Laryngeal Neoplasms --surgery--SU; Biopsy; Carcinoma, Adenoid Cystic--radiography--RA; Humans; Laryngeal Neoplasms--radiography--RA; Laryngectomy; Middle Aged; Tomography, X-Ray Computed

Record Date Created: 20100217

Record Date Completed: 20100521

Dialog eLink:

7/5/91 (Item 2 from file: 154)

DIALOG(R)File 154: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

19459202 **PMID:** 19707981

Rare type of quadricuspid aortic valve requiring surgical replacement.

Susak S; Torbica V; Velicki L; Golubovic M

Clinic for Cardiovascular Surgery, Institute of Cardiovascular Diseases of Vojvodina, Novi Sad, Serbia.

Thoracic and cardiovascular surgeon (Germany) Sep 2009, 57 (6) p364-6, ISSN:

1439-1902--Electronic 0171-6425--Linking **Journal Code:** 7903387

Publishing Model Print-Electronic

Document type: Case Reports; Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

Quadricuspid aortic valve, a rare congenital anomaly, is often related to severe aortic regurgitation and has a significant morbidity. The first described case was reported in 1862. Quadricuspid aortic valve is, in most cases, an isolated malformation, but it can be associated with other concomitant anomalies. We present here the case of a quadricuspid aortic valve discovered by intraoperative transesophageal echocardiography and successfully replaced with a mechanical aortic valve. Georg Thieme Verlag KG Stuttgart New York.

Tags: Male

Descriptors: *Aortic Valve--surgery--SU; *Aortic Valve Insufficiency--surgery--SU; *Heart Defects, Congenital--surgery--SU; *Heart Valve Prosthesis Implantation; Aortic

Valve--abnormalities--AB; Aortic Valve--ultrasonography--US; Aortic Valve Insufficiency--etiology--ET; Aortic Valve Insufficiency --ultrasonography--US;

Echocardiography, Transesophageal; Heart Defects, Congenital--ultrasonography--US; Humans; Incidental Findings; Intraoperative Care; Middle Aged; Treatment Outcome

Record Date Created: 20090826 Record Date Completed: 20091112

Date of Electronic Publication: 20090825

Dialog eLink:

7/5/92 (Item 3 from file: 154)

DIALOG(R)File 154: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

18253736 **PMID:** 18044331

[Massive GIST of the stomach--case report]

Jovovic M; Bajic P; Golubovic M; Dobricanin V; Maric I Klinicki centar Crue Gore, Hirurska klinika, Podgorica.

Acta chirurgica Iugoslavica (Serbia and Montenegro) 2007, 54 (2) p127-9, ISSN:

0354-950X--Print 0354-950X--Linking **Journal Code:** 0372631

Publishing Model Print

Document type: Case Reports; English Abstract; Journal Article

Languages: SERBIAN

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

Gastrointestinal stromal tumors (GIST) are rare mesenchimal neoplasmas of the gastrointestinal tract. The diagnosis of this tumors are oftenly very difficult. Patients with this tumor are usually addmited to the hospital cause of the gastrointestinal bleeding, abdominal pain, abdominal distension, disphagia, obstructive jaundice and bowel obsstruction. In this case report, we present a 86 year old patient with massive GIST of the stomach which was not preoperatively diagnosed.

Tags: Female

Descriptors: *Gastrointestinal Stromal Tumors--pathology--PA; *Stomach Neoplasms --

pathology--PA; Aged, 80 and over; Humans

Record Date Created: 20071129 **Record Date Completed:** 20080115

Dialog eLink:

7/5/93 (Item 4 from file: 154)

DIALOG(R)File 154: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

18197658 **PMID:** 17514752

A method for lipase co-precipitation in a biodegradable protein matrix.

Golubovic M; van Hateren S H; Ottens M; Witkamp G J; van der Wielen L A M Delft University of Technology, Department of Biotechnology, Julianalaan 67, 2628 BC Delft, The Netherlands.

Biotechnology and bioengineering (United States) Dec 15 2007, 98 (6) p1209-18,

ISSN: 0006-3592--Print 0006-3592--Linking **Journal Code:** 7502021

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH
Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

This article presents a novel method for immobilization of active ingredients. The method

is based on CO(2) aided active ingredient co-precipitation with glycinin, a biodegradable protein matrix from edible soybean protein. Glycinin precipitates abundantly under isoelectric conditions and serves as the matrix within which the active substance is trapped during the precipitation process. The enzyme lipase from Candida rugosa was successfully co-precipitated into the protein pellet to prove the principle. It was shown that the lipase within the co-precipitate retained lipase and esterase activity under different pH conditions. In some cases the activity was even higher than the activity of crude lipase, possibly due to the protective role of the matrix protein. Due to the retained lipase activity and food-grade quality of the binary precipitate, it has potential of being used in the food or pharmaceutical industry. Additional quality of the binary precipitate is the potentially significantly reduced downstream processing due to the fact that no organic solvents or precipitants were used in the precipitation process. Copyright 2007 Wiley Periodicals, Inc.

Descriptors: *Biotechnology--methods--MT; *Candida--enzymology--EN; *Lipase--chemistry --CH; *Soybean Proteins--chemistry--CH; Cells, Immobilized; Chemical Precipitation; Globulins--chemistry--CH; Microscopy, Electron, Scanning; Multiprotein Complexes--chemistry--CH

CAS Registry No.: 0 (Globulins); 0 (Multiprotein Complexes); 0 (Soybean Proteins);

9007-93-6 (glycinin)

Enzyme No.: EC 3.1.1.3 (Lipase) **Record Date Created:** 20071030 **Record Date Completed:** 20080115

Dialog eLink:

7/5/94 (Item 5 from file: 154)

DIALOG(R)File 154: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

16631625 **PMID:** 15969506

Novel method for the production of pure glycinin from soybeans.

Golubovic Marijana; van Hateren Stef H; Ottens Marcel; Witkamp Geert-Jan; van der Wielen Luuk A M

Department of Biotechnology, Delft University of Technology, The Netherlands. Journal of agricultural and food chemistry (United States) Jun 29 2005, 53 (13) p5265-9, ISSN: 0021-8561--Print 0021-8561--Linking Journal Code: 0374755

Publishing Model Print

Document type: Journal Article; Research Support, Non-U.S. Gov't

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

A novel method for the purification of glycinin from soy meal is presented. The method is based on the isoelectric precipitation of glycinin by using carbon dioxide as a volatile precipitant. Gaseous CO(2) was pressurized into the protein solution, thus lowering the

pH and initiating glycinin precipitation. Pressurization and, consequently, acidification were done in a slow and controlled manner, with the end point of pH 6.4. The acidity of the protein solution was well controlled via the pressure of gaseous CO(2). In this way simultaneous precipitation of other soybean proteins was prevented and very pure glycinin was obtained. Approximately 40% of the glycinin present in the protein solution was recovered with purity as high as 98%. The purification process was successfully performed on both small and large scales, without affecting glycinin purity.

Descriptors: *Globulins--isolation and purification--IP; *Soybeans--chemistry--CH; Carbon Dioxide; Chemical Precipitation; Globulins--ultrastructure--UL; Hydrogen-Ion Concentration; Microscopy, Electron, Scanning; Pressure; Solubility; Soybean Proteins CAS Registry No.: 0 (Globulins); 0 (Soybean Proteins); 124-38-9 (Carbon Dioxide);

9007-93-6 (glycinin)

Record Date Created: 20050622 **Record Date Completed:** 20050815

Dialog eLink:

7/5/95 (Item 6 from file: 154)

DIALOG(R)File 154: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

16110555 **PMID:** 15329933

Preparation, optimization, and structures of cross-linked enzyme aggregates (CLEAs).

Schoevaart R; Wolbers M W; Golubovic M; Ottens M; Kieboom A P G; van Rantwijk F; van der Wielen L A M; Sheldon R A

Biocatalysis and Organic Chemistry, Department of Biotechnology, Delft University of Technology, Julianalaan 136, 2628 BL, The Netherlands.

Biotechnology and bioengineering (United States) Sep 20 2004, 87 (6) p754-62,

ISSN: 0006-3592--Print 0006-3592--Linking **Journal Code:** 7502021

Publishing Model Print

Document type: Comparative Study; Evaluation Studies; Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

The broad applicability of the cross-linking of enzyme aggregates to the effective immobilisation of enzymes is demonstrated and the influence of many parameters on the properties of the resulting CLEAs is determined. The relative simplicity of the operation ideally lends itself to high-throughput methodologies. The aggregation method was improved up to 100% activity yield for any enzyme. For the first time, the physical structures of CLEAs are elucidated. Copyright 2004 Wiley Periodicals, Inc.

Descriptors: *Cross-Linking Reagents--chemistry--CH; *Enzymes--chemistry--CH; *Enzymes --ultrastructure--UL; *Multiprotein Complexes--chemistry--CH; *Multiprotein Complexes--isolation and

purification--IP; Enzymes, Immobilized--chemistry--CH; Enzymes, Immobilized--isolation and purification--IP; Enzymes, Immobilized--ultrastructure--UL; Fractional Precipitation; Multiprotein Complexes--isolation and purification--IP; Particle Size; Protein Conformation

CAS Registry No.: 0 (Cross-Linking Reagents); 0 (Enzymes); 0 (Enzymes,

Immobilized); 0 (Multiprotein Complexes)

Record Date Created: 20040826 **Record Date Completed:** 20050322

Dialog eLink:

7/5/96 (Item 7 from file: 154)

DIALOG(R)File 154: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

13984931 **PMID:** 11089375

[Subcutaneous pseudoaneurysm of the left ventricle--a rare complication of ischemic dilated cardiomyopathy]

Supkutana pseudoaneurizma leve komore--retka komplikacija ishemijske dilatativne kardiomiopatije.

Mijatov M; Jonjev Z; Konstantinovic Z; Golubovic M; Radovanovic N Univerzitetska klinika za kardiovaskularnu hirurgiju, Sremska Kamenica, Medicinski fakultet, Novi Sad.

Medicinski pregled (YUGOSLAVIA) May-Jun 2000, 53 (5-6) p301-4, ISSN: 0025-

8105--Print 0025-8105--Linking **Journal Code:** 2985249R

Publishing Model Print

Document type: Case Reports; English Abstract; Journal Article

Languages: CROATIAN
Main Citation Owner: NLM

Record type: MEDLINE: Completed

Subfile: INDEX MEDICUS

INTRODUCTION: Pseudoaneurysm of the heart is extremely rare in cardiology and cardiac surgery. It can be presented as a complication of myocardial infarction, cardiac trauma or surgical intervention. CASE PRESENTATION: 9 years after by-pass surgery combined with left ventricle aneurysmectomy a 69-year-old patient was admitted in hospital after full cardiologic examination. On admission, during routine chest examination 9 years after by-pass surgery combined with left ventricle aneurysmectomy, a great pulsatile mass was found in the region of left mammilla++. A left ventricle aneurysm (aneurysm per magna) was confirmed by all noninvasive and invasive tests, and new surgical aneurysmectomy was indicated. The existence of pseudoaneurysm was suspected by intraoperative transesophageal echocardiography and during the operation a false aneurysm was finally confirmed. DISCUSSION: False aneurysm develops after acute rupture of an infarcted left ventricle area. It is usually fatal, but if the adhesion or pericardial fibrosis exists and is adherent to epicardium it can create a saccular cavity (hemopericardium). Persistent communication between the left ventricle and

hemopericardium can create false aneurysm of different size and shape. In more than 50% of patients false aneurysm is found accidentally. In most cases the pseudoaneurysm is asymptomatic and the treatment is surgical. CONCLUSION: False aneurysms as case presentations are very rare. Sometimes they are difficult to confirm prior to surgery; even if full diagnostic screening was arranged (including 2-D transthoracic echocardiography, transesophageal echocardiography and complete hemodynamic investigation).

Tags: Male

Descriptors: *Aneurysm, False--etiology--ET; *Cardiomyopathy, Dilated--complications--CO; *Heart Aneurysm--etiology--ET; Aged; Aneurysm, False--diagnosis--DI; Aneurysm, False--surgery--SU; Heart Aneurysm--diagnosis--DI; Heart

Aneurysm--surgery--SU; Humans Record Date Created: 20001204 Record Date Completed: 20001214

Dialog eLink:

7/5/97 (Item 8 from file: 154)

DIALOG(R)File 154: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

13872015 **PMID:** 10953555

[Comparison of preoperative and postoperative hemodynamic parameters in replacement or reconstruction of the mitral valve in ischemic dilated cardiomyopathy]

Uporedivanje preoperativnih i postoperativnih vrednosti hemodinamickih parametara kod zamene i rekonstrukcije mitralnog zaliska u ishemicnoj dilatativnoj kardiomiopatiji.

Mijatov M; Jonjev Z; Konstantinovic Z; Golubovic M; Radovanovic N

Institut za kardiovaskularne bolesti Univerzitetska klinika za kardiovaskularnu hirurgiju, Sremska Kamenica.

Medicinski pregled (YUGOSLAVIA) Jan-Feb 2000, 53 (1-2) p68-73, ISSN: 0025-

8105--Print 0025-8105--Linking **Journal Code:** 2985249R

Publishing Model Print

Document type: Comparative Study; English Abstract; Journal Article

Languages: CROATIAN **Main Citation Owner:** NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

INTRODUCTION: Ischemic mitral insufficiency is a clinical syndrome described as a consequence of the coronary artery disease where the basic problem is blood regurgitation between the left ventricle and left atrium following mitral annulus dilatation. Mitral regurgitation occurs in different degrees during the natural evolution of the ischemic heart disease. The main reason for the existence of mitral regurgitation is global deterioration in the left ventricle geometry as a consequence of myocardial infarction or/and left ventricle dilatation. Surgical correction of this problem is possible by simultaneous correction of mitral insufficiency (repair or replacement) and complete

myocardial revascularisation. MATERIAL AND METHODS: Complete hemodynamic monitoring was followed by Swan-Ganz catheter including: central venous pressure, mean pulmonary artery pressure, pulmonary capillary wedge pressure, cardiac output, cardiac index and pulmonary vascular resistance. All surgical procedures were performed in extracorporeal circulation (ECC) with membrane oxygenator using moderate systemic hypothermia and transseptal surgical approach to mitral valve. Hemodynamic parameters were followed before and after ECC, immediately after surgery and during the first 48 hours after operation in the intensive care unit. In 88 patients posterior semicircular annuloplasty by N. Radovanovic was performed whereas in 13 patients mitral valve replacement was done. RESULTS: There is a great, statistically significant hemodynamic improvement after the surgical procedure and during the continuous 48 hours monitoring in the intensive care unit no matter if mitral repair or replacement was done. No statistically significant difference was recorded between these two groups considering that the hemodynamic improvement is very similar. DISCUSSION: Simultaneous surgical procedures, including myocardial revascularization, mitral and usually consecutive tricuspid insufficiency correction, are a very common surgical problem with higher operative risk than isolated coronary bypass procedures. In 88 cases where mitral reconstruction was possible, posterior semicircular reductive annuloplasty was performed. Thus mitral annulus area reduction is achieved preserving its physiologic shape and avoiding rigidity. Mitral valve replacement includes implantation of the latest generation of bileaflet valve prosthesis and operative technique that preserves subvalvular apparatus to maintain myocardial contractility as much as possible. This policy and also good immediate postoperative care, improve the hemodynamic status in both groups. CONCLUSION: All hemodynamic parameters followed by ECC and 48 hours in the intensive care unit were significantly improved no matter whether mitral reconstruction or replacement was done. There is no statistically significant difference in hemodynamic parameters and clinical improvement between these two groups. Carefully chosen operative tactic and techniques as well as good preoperative and postoperative care may explain these very good results.

Tags: Female; Male

Descriptors: *Cardiomyopathy, Dilated--complications--CO; *Hemodynamics; *Mitral Valve --surgery--SU; *Mitral Valve Insufficiency--surgery--SU; *Myocardial Ischemia-complications--CO; Cardiomyopathy, Dilated--physiopathology--PP; Cardiomyopathy, Dilated --surgery--SU; Heart Valve Prosthesis Implantation; Humans; Middle Aged; Mitral Valve Insufficiency--physiopathology--PP; Myocardial Ischemia --physiopathology--PP; Myocardial Revascularization

Record Date Created: 20001026 Record Date Completed: 20001026

Dialog eLink:

7/5/98 (Item 9 from file: 154)

DIALOG(R)File 154: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

13451934 **PMID:** 10352502

[Diagnostic importance of fibronectin in chronic liver diseases]

Dijagnosticki znacaj fibronektina u hronicnim bolestima jetre. Golubovic M; Majkic-Singh N; Markovic S; Sumarac Z; Obradovic I

Institut za medicinsku biohemiju, Klinicki centar Srbije, Beograd.

Medicinski pregled (YUGOSLAVIA) Jan-Feb 1999, 52 (1-2) p35-8, ISSN: 0025-

8105--Print 0025-8105--Linking **Journal Code:** 2985249R

Publishing Model Print

Document type: English Abstract; Journal Article

Languages: CROATIAN **Main Citation Owner: NLM**

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

Plasma fibronectin was determined in 29 patients with decompensated cirrhosis (7 patients had bacterial infection) and 23 patients with malignant liver disease. The obtained values were compared with the fibronectin values in 20 healthy subjects belonging to the control group in order to determine the possible diagnostic value of this dimer glycoprotein of high molecular weight whose role in the organism has not been completely explained. Fibronectin was determined on nephelometer with the use of specific antiserum by Behringwerke. The results expressed as mean values and SD were compared with monofactorial variance analysis (method One-way ANOVA). Fibronectin values in patients with liver cirrhosis were statistically significantly lower than in the control group (p < 0.01), which is also the case with correlation with malignant liver disease (p < 0.01). The fibronectin values in patients with malignant diseases were almost the same as the control group values (p < 0.01). In 7 patients with liver cirrhosis and bacterial infection the fibronectin values were statistically significantly higher in relation to those in the remaining 22 patients with cirrhosis but without bacterial infection (p < 0.001). The investigation in this study indicated that the decrease of mean fibronectin values is related to hepatic failure which is of diagnostic value, while normal values in malignant diseases do not favor the opinion on fibronectin as a tumor marker. Higher fibronectin values in infection in patients with liver cirrhosis are not clear, which indicated the total complexity of the relation between fibronectin as a dimer glycoprotein and chronic liver diseases including malignant.

Tags: Female: Male

Descriptors: *Fibronectins--blood--BL; *Liver Cirrhosis--diagnosis--DI; *Liver Neoplasms --diagnosis--DI; Bacterial Infections--complications--CO; Biological Markers--blood--BL; Chronic Disease; Humans; Liver Cirrhosis--blood--BL; Liver Cirrhosis --complications--CO; Liver Neoplasms--blood--BL; Middle Aged

CAS Registry No.: 0 (Biological Markers); 0 (Fibronectins) **Record Date Created: 19990625**

Record Date Completed: 19990625

Dialog eLink:

7/5/99 (Item 10 from file: 154)

DIALOG(R)File 154: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

11439815 **PMID:** 17977408

[Significance of laboratory tests for differential diagnosis of acute renal allograft rejection and acute cyclosporine nephrotoxicity]

Znacaj laboratorijskih testova za diferencijalnu dijagnostiku akutnog odbacivanja transplantisanog bubrega i akutne ciklosporinske nefrotoksicnosti.

Simic-Ogrizovic S; Djukanovic Lj; Golubovic M; DimitrijevicZ; Mimic-Oka J; Simic T Srpski arhiv za celokupno lekarstvo (Serbia and Montenegro) May-Jun 1994, 122 (5-6) p133-6, **ISSN:** 0370-8179--Print 0370-8179--Linking **Journal Code:** 0027440

Publishing Model Print

Document type: English Abstract; Journal Article

Languages: SERBIAN

Main Citation Owner: NLM

Record type: MEDLINE; Completed **Subfile:** INDEX MEDICUS; Toxbib

The most frequent causes of renal allograft function deterioration in early postransplantation period are aucte rejection (AR) and acute cyclosporine nephotoxicity (CyA NT). In order to contribute to noninvasive diagnostics in differential diagnosis of these two disorders, glomerular and tubular function in 40 patients during 2-3 weeks after renal transplantation, were followed-up. The results showed that ischaemia, during any act of transplantation provoked functional and structural disorders of renal allografts. During acute rejection serum creatinine level was increased diuresis, sodium and beta-2 microglobulin levels were decreased, whyle there was no significant change in the urinary enzymes ativity. In acute CyA NT there was significantly greater fractional excretion of sodium and beta-2 mikroblobulin, as well as activity of N-acetly-beta-d glukosaminidase and alkaline phosphatase in urine in comparison to other examined groups.

Tags: Female; Male

Descriptors: *Cyclosporine--adverse effects--AE; *Graft Rejection--diagnosis--DI; *Immunosuppressive Agents--adverse effects--AE; *Kidney Diseases --chemically induced--CI; *Kidney Transplantation; Acute Disease; Adolescent; Adult; Diagnosis, Differentials Harmonic Videos Diseases disease; DI

Differential; Humans; Kidney Diseases--diagnosis--DI

CAS Registry No.: 0 (Immunosuppressive Agents); 59865-13-3 (Cyclosporine)

Record Date Created: 20071105 **Record Date Completed:** 20080108

Dialog eLink:

7/5/100 (Item 11 from file: 154) DIALOG(R)File 154: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

11114807 **PMID:** 8190192

Changes of urinary beta-2-microglobulin after renal transplantation.

Simic-Ogrizovic S; Djukanovic L; Golubovic M

Nephron (SWITZERLAND) 1994, 66 (3) p354-5, ISSN: 0028-2766--Print 0028-

2766--Linking **Journal Code:** 0331777

Publishing Model Print; Comment on Nephron. 1992;61(4):485-6 PMID 1501754

Document type: Comment; Letter

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

Tags: Female; Male

Descriptors: *Kidney Transplantation; *beta 2-Microglobulin--urine--UR; Adolescent;

Adult; Humans; Middle Aged

CAS Registry No.: 0 (beta 2-Microglobulin)

Record Date Created: 19940622 **Record Date Completed:** 19940622

Dialog eLink:

7/5/101 (Item 12 from file: 154) DIALOG(R)File 154: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

09789019 **PMID**: 2075539

[Ammoniemia in portosystemic encephalopathy--diagnostic, differential diagnostic and prognostic significance]

Amoniemija u porto sistemskoj encefalopatiji--dijagnosticki, diferencijalno dijagnosticki i prognosticki znacaj.

Marisavljivic A; Golubovic M; Tomic D; Krstic M

Emergency Centre, University School of Medicine, Belgrade.

Srpski arhiv za celokupno lekarstvo (YUGOSLAVIA) May-Jun 1990, 118 (5-6) p185-91, ISSN: 0370-8179--Print 0370-8179--Linking Journal Code: 0027440

Publishing Model Print

Document type: English Abstract; Journal Article

Languages: SERBIAN
Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

One year prospective study of 25 cirrhotic patients with portal systemic encephalopathy (PSE) admitted to the Emergency Care Centre in Belgrade was performed in order to investigate the significance of clinical, biochemical and electroencephalographic (EEG) parameters and blood ammonia in the diagnosis, differential diagnosis and prognosis of PSE. 15 cirrhotic patients without PSE (of comparable age, sex, duration and etiology of liver cirrhosis) constituted the control group. Ammonia levels were elevated in 84% of patients with PSE (112 +/- 72 mumol/l) and reached normal range within 3 +/- 0.44 days,

but with no correlation to clinical improvement (p greater than 0.1). Ammonia levels correlated with the severity of PSE (p less than 0.05), but not with other biochemical parameters (prothrombin time, bilirubin, albumin, urea, creatinine, potassium). Overall mortality was 44% and was strongly correlated (p less than 0.01) to the severity of PSE. In addition, the mortality in patients with gastrointestinal bleeding and PSE was higher (p less than 0.05), than in PSE precipitated by other conditions. We concluded that the ammonia may be a primary diagnostic parameter for PSE in the absence of the most important diagnostical methods (EEG, psychometric tests). Secondly, ammonia are of great diagnostic importance in patients with coma of unknown origin and can help in deciding admission priorities. The ammonia levels do not appear to be a useful prognostic factor.

Tags: Female; Male

Descriptors: *Ammonia--blood--BL; *Hepatic Encephalopathy--diagnosis--DI; Diagnosis, Differential; Electroencephalography; Hepatic Encephalopathy --blood--BL; Hepatic Encephalopathy--physiopathology--PP; Humans; Middle Aged; Prognosis;

Prospective Studies

CAS Registry No.: 7664-41-7 (Ammonia)

Record Date Created: 19910418 Record Date Completed: 19910418

Dialog eLink:

7/5/102 (Item 1 from file: 172)

DIALOG(R)File 172: EMBASE Alert (c) 2010 Elsevier B.V. All rights reserved.

0001046528 **EMBASE No:** 2010083268

Correlation between disease progression and histopathologic criterions of the lip squamous cell carcinoma

Povezanost histopatoloskih karakteristika karcinoma usne sa progresijom bolesti Golubovic M.; Asanin B.: Jelovac D.; Petrovic M.; Antunovic M.

Medicinski Fakultet, Klinicki Centar Crne Gore, Centar za Patologiju I Sudsku Medicinu, Podgorica, Croatia

AUTHOR EMAIL: miletagol@t-com.me

CORRESP. AUTHOR/AFFIL: Golubovic M.: Medicinski Fakultet. Klinicki Centar

Crne Gore, Centar za Patologiju I Sudsku Medicinu, Podgorica, Croatia

CORRESP. AUTHOR EMAIL: miletagol@t-com.me

Vojnosanitetski Pregled (Vojnosanit, Pregl.) (Serbia) January 1, 2010, 67/1 (19-24)

PUBLISHER: Vojnomedicinske akademija **CODEN:** VSPRA **ISSN:** 0042-8450

URL: http://www.vma.mod.gov.rs/vsp/download/vsp_01_10.pdf

DOCUMENT TYPE: Journal; Article **RECORD TYPE:** Abstract LANGUAGE: Croatian SUMMARY LANGUAGE: English; Croatian

NUMBER OF REFERENCES: 33

Background/Aim. The most common malignancy of the lip is squamous cell carcinoma (SCC). In our population, according to epidemiological data, almost a half of all (45%) SCC of oral mucous tissue spreads over the lower and upper lip. The aim of this study was to estimate prognostic importance of histopathologic characteristics - histologic grade, nuclear grade and tumor size in relation to the appearance of lymph node metastases and relapse in SCC of the lip. Methods. In the retrospective-prospective study 70 cases of lower and upper lip SCC were analyzed. They were diagnosed from 2002 to 2006 in the Clinic of Maxillofacial Surgery, Clinical Center of Montenegro. The data about localization of the carcinomas, histopathologic characteristics and lymph node status were taken from medical files of the patients. The patients were followed up in a 3year period and the disease relapse or/and metastatic disease appearance were registereds. Results. There was statistically significant difference in tumor size among the patients with and without disease relapse (p = 0.027). Logistic regression analysis showed that the tumor size is a statistically significant factor (R = 0.186; p = 0.011) for the appearance of regional lymph node metastases. Relative risk [exp (B)] for the appearance of regional lymph node metastases in relation to tumor size was 2.807. Conclusion. Histologic and nuclear grade of lip SCC are not prognostic factors for the appearance of the disease relapse and regional lymph node metastases. Tumor size is a predictive factor of the relapse appearance, as well as for lymph node metastases appearance. In clinical practice, tumor size is a factor that classifies patients with lip SCC into the groups of higher and smaller risk of relapse appearance and for lymph node metastases appearance. Our results suggest that, risk for lymph node metastases appearance increases 2.8 times with increasing of the tumor size over 2 cm in diameter.

AUTHOR KEYWORDS: Disease progression; Histological techniques; Lip neoplasms; Neoplasm metastasis; Neoplasm staging; Neoplasms squamous cell; Risk factors

Dialog eLink:

7/5/103 (Item 2 from file: 172)

DIALOG(R)File 172: EMBASE Alert (c) 2010 Elsevier B.V. All rights reserved.

0000859702 **EMBASE No:** 2009559973

Rare type of quadricuspid aortic valve requiring surgical replacement

Susak S.; Torbica V.; Velicki L.; Golubovic M.

Clinic for Cardiovascular Surgery, Institute of Cardiovascular Diseases of Vojvodina, Pecka 14 Novi, Sad 21000, Serbia

AUTHOR EMAIL: velar@sbb.rs

CORRESP. AUTHOR/AFFIL: Velicki L.: Clinic for Cardiovascular Surgery, Institute of Cardiovascular Diseases of Vojvodina, Pecka 14 Novi, Sad 21000, Serbia

CORRESP. AUTHOR EMAIL: velar@sbb.rs

Thoracic and Cardiovascular Surgeon (Thorac. Cardiovasc. Surg.) (Germany)

January 1, 2009, 57/6 (364-366)

PUBLISHER: Georg Thieme Verlag

CODEN: TVCHA ISSN: 0171-6425 ISSN: 1439-1902

Item Identifier (DOI): 10.1055/s-0029-1185563

DOCUMENT TYPE: Journal ; Article **RECORD TYPE:** Abstract

LANGUAGE: English SUMMARY LANGUAGE: English

NUMBER OF REFERENCES: 8

Quadricuspid aortic valve, a rare congenital anomaly, is often related to severe aortic regurgitation and has a significant morbidity, The first described case was reported in 1862, Quadricuspid aortic valve is, in most cases, an isolated malformation, but it can be associated with other concomitant anomalies, We present here the case of a quadricuspid aortic valve discovered by intraoperative transesophageal echocardiography and successfully replaced with a mechanical aortic valve, Heart valve surgery, heart disease, cardiovascular surgery. (c) Georg Thieme Verlag KG Stuttgart New York.

Dialog eLink:

7/5/104 (Item 1 from file: 357)

DIALOG(R)File 357: Derwent Biotech Res. (c) 2010 Thomson Reuters. All rights reserved.

0347366 **DBA Accession No.:** 2004-19658

Preparation, optimization, and structures of cross-linked enzyme aggregates (CLEAs) for use in immobilization and optimization

Author: SCHOEVAART R; WOLBERS MW; GOLUBOVIC M; OTTENS M; KIEBOOM APG; VAN RANTWIJK F; VAN DER WIELEN LAM; SHELDON RA

Corporate Affiliate: Delft Univ Technol Delft Univ Technol Leiden Univ

Corporate Source: Sheldon RA, Delft Univ Technol, Dept Biotechnol, Julianalaan 136,

NL-2628 BL Delft, Netherlands

Journal: BIOTECHNOLOGY AND BIOENGINEERING (87, 6, 754-762) 2004

ISSN: 0006-3592 Language: English

Abstract: AUTHOR ABSTRACT - The broad applicability of the cross-linking of enzyme aggregates to the effective immobilisation of enzymes is demonstrated and the influence of many parameters on the properties of the resulting CLEAs is determined, The relative simplicity of the operation ideally lends itself to high-throughput methodologies. The aggregation method was improved up to 100% activity yield for any enzyme. For the first time, the physical structures of CLEAs are elucidated. (C) 2004 Wiley Periodicals, Inc. (9 pages)

Descriptors: crosslinked enzyme crystal, crosslinked enzyme aggregate prep.,

optimization, immobilization (23, 40)

Section: BIOMANUFACTURING and BIOCATALYSIS-Biocatalyst Application

7/5/105 (Item 1 from file: 434)

DIALOG(R)File 434: SciSearch(R) Cited Ref Sci (c) 2006 The Thomson Corp. All rights reserved.

08085086 Genuine Article#: H2332 Number of References: 0

Title: CHANGES IN ENERGY POTENTIAL OF LENSES OF RATS EXPOSED

TO COPPER POISONING

Author: POSTICGRUJIN A; SAVIC S; GOLUBOVIC M

Journal: OPHTHALMIC RESEARCH, 1987, V 19, N1, P 38

Language: ENGLISH Document Type: MEETING ABSTRACT

Subfile: SciSearch; CC LIFE--Current Contents, Life Sciences

Journal Subject Category: OPHTHALMOLOGY

Descriptors: SCI

7/5/106 (Item 2 from file: 434)

DIALOG(R)File 434: SciSearch(R) Cited Ref Sci (c) 2006 The Thomson Corp. All rights reserved.

08085081 Genuine Article#: H2332 Number of References: 0

Title: ACTIVITY OF SEVERAL ENZYMES INVOLVED IN CARBOHYDRATE-METABOLISM IN THE LENS WITH PATIENTS WITH CATARACTS OF DIFFERENT ETIOLOGY

Author: GOLUBOVIC M; SAVIC S; JOVANOVIC S; MAJKICSINGH N; SPASIC S;

POSTICGRUJIN A

Journal: OPHTHALMIC RESEARCH, 1987, V 19, N1, P 37 Language: ENGLISH Document Type: MEETING ABSTRACT Subfile: SciSearch; CC LIFE--Current Contents, Life Sciences

Journal Subject Category: OPHTHALMOLOGY

Descriptors: SCI

7/5/107 (Item 3 from file: 434)

DIALOG(R)File 434: SciSearch(R) Cited Ref Sci (c) 2006 The Thomson Corp. All rights reserved.

02871887 Genuine Article#: HU791 Number of References: 1

Title: ELECTROPHORESIS AND IMMUNOELECTROPHORESIS OF THE AQUEOUS-HUMOR AND BLOOD-SERUM IN PERSONS WITH SENILE CATARACT

Author: STANOJETICPAOVIC A; MILETIC V; BLAGOJEVIC M; GOLUBOVIC M

Corporate Source: UNIV BELGRADE, FAC MED, EYE CLIN/YU-11000

BELGRADE//YUGOSLAVIA/

Journal: PERIODICUM BIOLOGORUM, 1979, V 81, N2, P 521-523

Language: ENGLISH Document Type: ARTICLE

Geographic Location: YUGOSLAVIA

Subfile: SciSearch; CC LIFE--Current Contents, Life Sciences

Journal Subject Category: BIOLOGY

Descriptors: SCI **Cited References:**

AMSLER M, 1955, RAPP SOC FRANC OPHTA

Dialog eLink:

7/5/108 (Item 1 from file: 156) DIALOG(R)File 156: ToxFile

(c) format only 2010 Dialog. All rights reserved.

3247196 NLM Doc No: 17977408

[Significance of laboratory tests for differential diagnosis of acute renal allograft rejection and acute cyclosporine nephrotoxicity]

Znacaj laboratorijskih testova za diferencijalnu dijagnostiku akutnog odbacivanja transplantisanog bubrega i akutne ciklosporinske nefrotoksicnosti.

Simic-Ogrizovic S; Djukanovic Lj; Golubovic M; DimitrijevicZ; Mimic-Oka J; Simic T **Journal Name:** Srpski arhiv za celokupno lekarstvo (Serbia and Montenegro) Pub. Year: May-Jun 1994 122 (5-6) p133-6, **ISSN:** 0370-8179 Print 0370-8179 Linking

Journal Code: 0027440 **Publishing Model Print**

Document type: English Abstract; Journal Article

Languages: SERBIAN

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: Toxbib; INDEX MEDICUS; Toxbib

The most frequent causes of renal allograft function deterioration in early postransplantation period are aucte rejection (AR) and acute cyclosporine nephotoxicity (CyA NT). In order to contribute to noninvasive diagnostics in differential diagnosis of these two disorders, glomerular and tubular function in 40 patients during 2-3 weeks after renal transplantation, were followed-up. The results showed that ischaemia, during any act of transplantation provoked functional and structural disorders of renal allografts. During acute rejection serum creatinine level was increased diuresis, sodium and beta-2 microglobulin levels were decreased, whyle there was no significant change in the urinary enzymes ativity. In acute CyA NT there was significantly greater fractional excretion of sodium and beta-2 mikroblobulin, as well as activity of N-acetly-beta-d glukosaminidase and alkaline phosphatase in urine in comparison to other examined groups.

Tags: Female; Male

Descriptors: *Cyclosporine--adverse effects--AE; *Graft Rejection--diagnosis--DI; *Immunosuppressive Agents--adverse effects--AE; *Kidney Diseases --chemically induced--CI; *Kidney Transplantation; Acute Disease; Adolescent; Adult; Diagnosis, Differential; Humans; Kidney Diseases--diagnosis--DI

CAS Registry No.: 0 (Immunosuppressive Agents); 59865-13-3 (Cyclosporine)

Record Date Created: 20071105 **Record Date Completed:** 20080108

Dialog eLink:

7/5/109 (Item 1 from file: 159) DIALOG(R)File 159: Cancerlit

(c) format only 2002 Dialog. All rights reserved.

02536755 99280768 PMID: 10352502

[Diagnostic importance of fibronectin in chronic liver diseases]

Dijagnosticki znacaj fibronektina u hronicnim bolestima jetre.

Golubovic M; Majkic-Singh N; Markovic S; Sumarac Z; Obradovic I Institut za medicinsku biohemiju, Klinicki centar Srbije, Beograd.

Med Pregl (YUGOSLAVIA)

Jan-Feb 1999,

52 (1-2) p35-8, ISSN 0025-8105 **Journal Code:** 2985249R

Document Type: Journal Article English Abstract **Languages:** SERBO-CROATIAN (ROMAN)

Main Citation Owner: NLM Record type: Completed Subfile: INDEX MEDICUS

Plasma fibronectin was determined in 29 patients with decompensated cirrhosis (7 patients had bacterial infection) and 23 patients with malignant liver disease. The obtained values were compared with the fibronectin values in 20 healthy subjects belonging to the control group in order to determine the possible diagnostic value of this dimer glycoprotein of high molecular weight whose role in the organism has not been completely explained. Fibronectin was determined on nephelometer with the use of specific antiserum by Behringwerke. The results expressed as mean values and SD were compared with monofactorial variance analysis (method One-way ANOVA). Fibronectin values in patients with liver cirrhosis were statistically significantly lower than in the control group (p < 0.01), which is also the case with correlation with malignant liver disease (p < 0.01). The fibronectin values in patients with malignant diseases were almost the same as the control group values (p < 0.01). In 7 patients with liver cirrhosis and bacterial infection the fibronectin values were statistically significantly higher in relation to those in the remaining 22 patients with cirrhosis but without bacterial infection (p < 0.001). The investigation in this study indicated that the decrease of mean fibronectin values is related to hepatic failure which is of diagnostic value, while normal values in malignant diseases do not favor the opinion on fibronectin as a tumor marker. Higher fibronectin values in infection in patients with liver cirrhosis are not clear, which indicated the total complexity of the relation between fibronectin as a dimer glycoprotein and chronic liver diseases including malignant.

Tags: Female; Human; Male

Major Descriptors: *Fibronectins--blood--BL; *Liver Cirrhosis--diagnosis--DI; *Liver

Neoplasms --diagnosis--DI

Minor Descriptors: Bacterial Infections--complications--CO; Biological Markers--

blood--BL; Chronic Disease; Liver Cirrhosis--blood--BL; Liver Cirrhosis --

complications--CO; Liver Neoplasms--blood--BL; Middle Age CAS Registry No.: 0 (Biological Markers); 0 (Fibronectins)

Record Date Created: 19990625

Dialog eLink:

7/5/110 (Item 2 from file: 159) DIALOG(R)File 159: Cancerlit

(c) format only 2002 Dialog. All rights reserved.

01589828 87095695 PMID: 3798827

[Diagnostic importance of LDH activity in the chamber fluid in intraocular tumors]

Dijagnosticki znacaj aktivnosti LDH u komornoj tecnosti kod intraokularnih tumora.

Golubovic M; Ivanovic I; Jovanovic S Vojnosanit Pregl (YUGOSLAVIA) Sep-Oct 1986,

43 (5) p364-6, ISSN 0042-8450 **Journal Code:** 21530700R

Document Type: Journal Article English Abstract **Languages:** SERBO-CROATIAN (ROMAN)

Main Citation Owner: NLM Record type: Completed Subfile: INDEX MEDICUS

Tags: Human

Major Descriptors: *Aqueous Humor--enzymology--EN; *Enzyme Tests; *Eye Neoplasms--diagnosis --DI; *Lactate Dehydrogenase--analysis--AN; *Retinoblastoma--diagnosis -DI

diagnosis--DI

Minor Descriptors: Cataract--enzymology--EN; Choroid Neoplasms--diagnosis--DI; Choroid Neoplasms--enzymology--EN; Eye Neoplasms--enzymology--EN; Melanoma --diagnosis--DI; Melanoma--enzymology--EN; Retinoblastoma--enzymology--EN

Enzyme No.: EC 1.1.1.27 (Lactate Dehydrogenase)

Record Date Created: 19870129

? **ds**

```
S5 1 S4 AND (CO-PRECIPITAT? OR COPRECIPIT? OR CO-AGGREGAT?)
OR C-
O-AGGREGAT?)
S6 0 (CO-PRECIPITAT? OR COPRECIPITAT?)(W) (ACIDIFICATION)
S7 110 AU='GOLUBOVIC M':AU='GOLUBOVIC MARIJANA' OR
AU='GOLUBOVIC -
MIRJANA' AND PROTEIN
S8 2 S7 AND AGGREGATE
```

? t s8/5/all

Dialog eLink:

8/5/1 (Item 1 from file: 144) DIALOG(R)File 144: Pascal

(c) 2010 INIST/CNRS. All rights reserved. 16925889 PASCAL No.: 04-0590255

Preparation, optimization, and structures of cross-linked enzyme aggregates (CLEAs)

SCHOEVAART R; WOLBERS M W; GOLUBOVIC M; OTTENS M; KIEBOOM A P G; VAN RANTWIJK F; VAN DER WIELEN L A M; SHELDON R A Biocatalysis and Organic Chemistry, Department of Biotechnology, Delft

University of Technology, Julianalaan 136, 2628 BL Delft, Netherlands; Industrial Fermentative Chemistry, Leiden University, P. O. Box 9502, 2300

RA Leiden, Netherlands; Bioseparation Technology, Department of Biotechnology, Delft University of Technology, Julianalaan 67, 2628 BC Delft, Netherlands

Journal: Biotechnology and bioengineering,

2004, 87 (6)

754-762

ISSN: 0006-3592 CODEN: BIBIAU Availability: INIST-9164;

354000113993010070

No. of Refs.: 23 ref.

Document Type: P (Serial) ; A (Analytic) Country of Publication: United States

Language: English

The broad applicability of the cross-linking of enzyme aggregates to the

effective immobilisation of enzymes is demonstrated and the influence of

many parameters on the properties of the resulting CLEAs is determined. The

relative simplicity of the operation ideally lends itself to

high-throughput methodologies. The aggregation method was improved up to

100% activity yield for any enzyme. For the first time, the physical

structures of CLEAs are elucidated.

English Descriptors: Optimization; Crosslinking; Enzyme;
Immobilization;
Aggregate

French Descriptors: Optimisation; Reticulation; Enzyme; Immobilisation; Agregat

Classification Codes: 002A31C05B; 215

Copyright (c) 2004 INIST-CNRS. All rights reserved.

Dialog eLink:

8/5/2 (Item 1 from file: 357)

DIALOG(R)File 357: Derwent Biotech Res. (c) 2010 Thomson Reuters. All rights reserved.

0347366 **DBA Accession No.:** 2004-19658

Preparation, optimization, and structures of cross-linked enzyme aggregates (CLEAs) for use in immobilization and optimization

Author: SCHOEVAART R; WOLBERS MW; GOLUBOVIC M; OTTENS M; KIEBOOM APG; VAN RANTWIJK F; VAN DER WIELEN LAM; SHELDON RA

Corporate Affiliate: Delft Univ Technol Delft Univ Technol Leiden Univ

Corporate Source: Sheldon RA, Delft Univ Technol, Dept Biotechnol, Julianalaan 136,

NL-2628 BL Delft, Netherlands

Journal: BIOTECHNOLOGY AND BIOENGINEERING (87, 6, 754-762) 2004

ISSN: 0006-3592 Language: English

Abstract: AUTHOR ABSTRACT - The broad applicability of the cross-linking of enzyme aggregates to the effective immobilisation of enzymes is demonstrated and the influence of many parameters on the properties of the resulting CLEAs is determined, The relative simplicity of the operation ideally lends itself to high-throughput methodologies. The aggregation method was improved up to 100% activity yield for any enzyme. For the first time, the physical structures of CLEAs are elucidated. (C) 2004 Wiley Periodicals, Inc. (9 pages)

Descriptors: crosslinked enzyme crystal, crosslinked enzyme aggregate prep., optimization, immobilization (23, 40)

Section: BIOMANUFACTURING and BIOCATALYSIS-Biocatalyst Application

? e au=ottens m

Ref	Items	Index-term	
E1	1	AU=OTTENS	KEVIN
E2	1	AU=OTTENS	L
E3	96	*AU=OTTENS	M
E4	72	AU=OTTENS	М.
E5	2	AU=OTTENS	MAARTEN
E6	59	AU=OTTENS	MARCEL

```
2 AU=OTTENS NICOLIEN M
 E8
             1 AU=OTTENS O
 E9
 E10
            3 AU=OTTENS P
 E11
            7 AU=OTTENS P J
 E12
            1 AU=OTTENS P.
 E13
          30 AU=OTTENS P.J.
       19 AU=OTTENS PETRA J
17 AU=OTTENS PJ
13 AU=OTTENS R J
2 AU=OTTENS R L J M
 E14
 E15
 E16
 E17
          2 AU=OTTENS R L J M
 E18
           6 AU=OTTENS R.
 E19
           2 AU=OTTENS R.J.
 E20
            2 AU=OTTENS R.L.J.M.
         7 AU=OTTENS RE:
10 AU=OTTENS RJ
            7 AU=OTTENS REINHOLD
 E21
 E22
 E23
          21 AU=OTTENS RS
          2 AU=OTTENS RUSSELL J
 E24
 E25
           6 AU=OTTENS S
           3 AU=OTTENS S.
 E26
            1 AU=OTTENS TRISH
 E27
5 AU=OTTENS W
 E28
          1 AU=OTTENS-HILDEBRANDT, STEPHEN
1 AU=OTTENS-WAINRIGHT, PATRICIA
 E35
E37 1 AU=OTTENS-WAINRIGHT, F
E38 4 AU=OTTENS, A
E39 2 AU=OTTENS, A. J.
E40 2 AU=OTTENS, A. K.
E41 3 AU=OTTENS, A.K.
E42 4 AU=OTTENS, AK
E43 2 AU=OTTENS, ALLEN J.
E44 1 AU=OTTENS, ALLEN J.
E45 2 AU=OTTENS, ANDREAS
E46 1 AU=OTTENS, ANDREAS
 E36
 E47
            4 AU=OTTENS, ANDREW K
            21 AU=OTTENS, ANDREW K.
 E48
            2 AU=OTTENS, ANDREW KEITH
 E49
            2 AU=OTTENS, B.
 E50
 Enter P or PAGE for more
 ? s e3 or e4 or e6
```

3 AU=OTTENS N.M.

S9

```
96 AU=OTTENS M
72 AU=OTTENS M.
59 AU=OTTENS MARCEL
227 AU='OTTENS M' OR AU='OTTENS M.' OR AU='OTTENS MARCEL'
```

? s s9 and (aggregate or coaggregate)

```
308943 AGGREGATE
            1448 COAGGREGATE
            2 S9 AND (AGGREGATE OR COAGGREGATE)
     S10
? ds
Set
        Items
                Description
S1
                PROTEIN(S) (AGGREGAT$ OR PRECIPIT$) (S) (CO2 OR (CARBON
DIOXI-
            DE))
S2
          915
              PROTEIN(S) (AGGREGAT? OR PRECIPIT?) (S) (CO2 OR (CARBON
DIOXI-
            DE))
S3
          535 RD (unique items)
S4
         413
                S3 AND PY<=2004
S5
          1 S4 AND (CO-PRECIPITAT? OR COPRECIPIT? OR CO-AGGREGAT?
OR C-
            O-AGGREGAT?)
S6
                (CO-PRECIPITAT? OR COPRECIPITAT?) (W) (ACIDIFICATION)
          110
                AU='GOLUBOVIC M':AU='GOLUBOVIC MARIJANA' OR
AU='GOLUBOVIC -
            MIRJANA' AND PROTEIN
              $7 AND AGGREGATE
S9
          227 AU='OTTENS M' OR AU='OTTENS M.' OR AU='OTTENS MARCEL'
S10
            2 S9 AND (AGGREGATE OR COAGGREGATE)
? s s10 not s8
               2 S10
               2 S8
     S11
               0 S10 NOT S8
? s s9 and (precipitat? or acid?)
Processing
Processing
Processing
Processing
Processing
Processing
Processing
Processing
Processed 10 of 42 files ...
Processing
Processed 20 of 42 files ...
Processing
Processed 40 of 42 files ...
Completed processing all files
             227 S9
         1198575 PRECIPITAT?
        24080489 ACID?
    S12
             67 S9 AND (PRECIPITAT? OR ACID?)
```

>>>Duplicate detection is not supported for File 391.

>>>Records from unsupported files will be retained in the RD set. S13 23 RD (unique items)

? t s13/ti/all

>>> No matching display code(s) found in file(s):

Dialog eLink:

13/TI/1 (Item 1 from file: 155)

DIALOG(R)File 155: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

Precipitation of porcine insulin with carbon dioxide.

Dialog eLink:

13/TI/2 (Item 2 from file: 155)

DIALOG(R)File 155: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

A method for lipase co-precipitation in a biodegradable protein matrix.

Dialog eLink:

13/TI/3 (Item 3 from file: 155)

DIALOG(R)File 155: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

pH-gradient ion-exchange chromatography: an analytical tool for design and optimization of protein separations.

Dialog eLink:

13/TI/4 (Item 4 from file: 155)

DIALOG(R)File 155: MEDLINE(R) (c) format only 2010 Dialog. All rights reserved.

Phase behavior of an intact monoclonal antibody.

Dialog eLink:

13/TI/5 (Item 5 from file: 155) DIALOG(R)File 155: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

Novel method for the production of pure glycinin from soybeans.

Dialog eLink:

13/TI/6 (Item 6 from file: 155) DIALOG(R)File 155: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

Preparation, optimization, and structures of cross-linked enzyme aggregates (CLEAs).

Dialog eLink:

13/TI/7 (Item 7 from file: 155) DIALOG(R)File 155: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

Feasible boundaries of aqueous two-phase systems with NH(3) and CO(2) as recyclable volatile salts.

Dialog eLink:

13/TI/8 (Item 8 from file: 155)

DIALOG(R)File 155: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

Partitioning behavior of amino acids in aqueous two-phase systems with recyclable volatile salts.

Dialog eLink:

13/TI/9 (Item 1 from file: 5)

DIALOG(R)File 5: Biosis Previews(R)

(c) 2010 The Thomson Corporation. All rights reserved.

Manufacturing protein based structures using a volatile acid

Dialog eLink:

13/TI/10 (Item 1 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

Title: Application of Direct Fluid Flow Oscillations to Improve Mixing in Microbioreactors

Dialog eLink:

13/TI/11 (Item 2 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

Title: Solution crystallization kinetics of 6-aminopenicillanic acid

Dialog cLink:

13/TI/12 (Item 3 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

Title: A generalized approach to thermodynamic properties of biomolecules for use in bioseparation process design

Dialog eLink:

13/TI/13 (Item 4 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

Title: Impurity effects on the crystallization kinetics of ampicillin

Dialog eLink:

13/TI/14 (Item 5 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

Title: Reaction and diffusion during demineralization of animal bone

Dialog eLink:

13/TI/15 (Item 6 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

Title: Densities and solubilities of glycylglycine and glycyl-L-alanine in aqueous electrolyte solutions

Dialog eLink:

13/TI/16 (Item 7 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

Title: Determination of the activity coefficients of glycylglycine and glycyl-L-alanine in sodium chloride solutions by an electrochemical cell with ion-selective electrodes: experimental measurements and thermodynamic theory

Dialog eLink:

13/TI/17 (Item 8 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

Title: Transient gas-liquid flow in horizontal T-junctions

Dialog cLink:

13/TI/18 (Item 9 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

Title: Solubilities and partition coefficients of semi-synthetic antibiotics in water+1-butanol systems

Dialog eLink:

13/TI/19 (Item 10 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

Title: The kinetics of the dehydration of methylene glycol

Dialog eLink:

13/TI/20 (Item 11 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

Title: PolyHipe: A new polymeric support for heterogeneous catalytic reactions: Kinetics of hydration of cyclohexene in two- and three-phase systems over a strongly acidic sulfonated PolyHipe

Dialog eLink:

13/TI/21 (Item 1 from file: 72) DIALOG(R)File 72: EMBASE

(c) 2010 Elsevier B.V. All rights reserved.

Design strategies for integrated protein purification processes: Challenges, progress and outlook

Dialog eLink:

13/TI/22 (Item 1 from file: 144) DIALOG(R)File 144: Pascal

(c) 2010 INIST/CNRS. All rights reserved.

Precipitation of Porcine Insulin With Carbon Dioxide

Dialog eLink:

13/TI/23 (Item 2 from file: 144) DIALOG(R)File 144: Pascal

(c) 2010 INIST/CNRS. All rights reserved.

Potential of biosorption for the recovery of chromate in industrial wastewaters

? t s13/5/1 2 8 9 12

Dialog eLink:

13/5/1 (Item 1 from file: 155)

DIALOG(R)File 155: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

19352702 **PMID:** 19347960

Precipitation of porcine insulin with carbon dioxide.

Tashima Alexandre Keiji; Ottens Marcel; Van der Wielen Luuk A M; Cintra Dennys E;

Pauli Jose R; Filho Pedro de Alcantara Pessoa; Miranda Everson Alves

Faculdade de Engenharia Quimica, Universidade Estadual de Campinas-UNICAMP,

Campinas-SP, Brazil.

Biotechnology and bioengineering (United States) Aug 1 2009, 103 (5) p909-19,

ISSN: 1097-0290--Electronic 0006-3592--Linking **Journal Code:** 7502021

Publishing Model Print

Document type: Journal Article; Research Support, Non-U.S. Gov't

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

Recent works have pointed to the use of volatile electrolytes such as carbon dioxide (CO2) dissolved in aqueous solutions as a promising alternative to the precipitating agents conventionally used for protein recovery in the food and pharmaceutical industries. In this work we investigated experimental and theoretical aspects of the precipitation of porcine insulin, a biomolecule of pharmaceutical interest, using CO2 as an acid-precipitating agent. The solubility of porcine insulin in NaHCO3 solutions in pressurized CO2 was determined as a function of temperature and pressure, with a minimum being observed close to the protein isoelectric point. A thermodynamic model was developed and successfully utilized to correlate the experimental data. Insulin was considered a polyelectrolyte in the model and its self-association reactions were also taken into account. The biological activity of insulin was maintained after precipitation with CO2, although some activity can be lost if foam is formed in the depressurization step.

Descriptors: *Carbon Dioxide--metabolism--ME; *Chemical Fractionation--methods--MT; *Insulin--isolation and purification--IP; Carbonates--metabolism--ME; Chemical Precipitation; Isoelectric Point

CAS Registry No.: 0 (Carbonates); 11061-68-0 (Insulin); 124-38-9 (Carbon Dioxide);

497-19-8 (sodium carbonate)
Record Date Created: 20090622
Record Date Completed: 20090803

Dialog eLink:

13/5/2 (Item 2 from file: 155)

DIALOG(R)File 155: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

18197658 **PMID**: 17514752

A method for lipase co-precipitation in a biodegradable protein matrix.

Golubovic M; van Hateren S H; Ottens M; Witkamp G J; van der Wielen L A M Delft University of Technology, Department of Biotechnology, Julianalaan 67, 2628 BC Delft, The Netherlands.

Biotechnology and bioengineering (United States) Dec 15 2007, 98 (6) p1209-18,

ISSN: 0006-3592--Print 0006-3592--Linking **Journal Code:** 7502021

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH
Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

This article presents a novel method for immobilization of active ingredients. The method is based on CO(2) aided active ingredient co-precipitation with glycinin, a biodegradable protein matrix from edible soybean protein. Glycinin precipitates abundantly under isoelectric conditions and serves as the matrix within which the active substance is trapped during the precipitation process. The enzyme lipase from Candida rugosa was successfully co-precipitated into the protein pellet to prove the principle. It was shown that the lipase within the co-precipitate retained lipase and esterase activity under different pH conditions. In some cases the activity was even higher than the activity of crude lipase, possibly due to the protective role of the matrix protein. Due to the retained lipase activity and food-grade quality of the binary precipitate, it has potential of being used in the food or pharmaceutical industry. Additional quality of the binary precipitate is the potentially significantly reduced downstream processing due to the fact that no organic solvents or precipitants were used in the precipitation process. Copyright 2007 Wiley Periodicals, Inc.

Descriptors: *Biotechnology--methods--MT; *Candida--enzymology--EN; *Lipase--chemistry --CH; *Soybean Proteins--chemistry--CH; Cells, Immobilized; Chemical Precipitation; Globulins--chemistry--CH; Microscopy, Electron, Scanning; Multiprotein Complexes--chemistry--CH

CAS Registry No.: 0 (Globulins); 0 (Multiprotein Complexes); 0 (Soybean Proteins);

9007-93-6 (glycinin)

Enzyme No.: EC 3.1.1.3 (Lipase) **Record Date Created:** 20071030 **Record Date Completed:** 20080115

Dialog eLink:

13/5/8 (Item 8 from file: 155)

DIALOG(R)File 155: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

13859536 **PMID:** 10942302

Partitioning behavior of amino acids in aqueous two-phase systems with recyclable volatile salts.

van Berlo M; Ottens M; Luyben K C; van der Wielen L A

Kluyver Laboratory for Biotechnology, Delft University of Technology, The Netherlands.

Journal of chromatography. B, Biomedical sciences and applications (NETHERLANDS) Jun 23 2000, 743 (1-2) p317-25, ISSN: 1387-2273--Print 1387-2273--Linking

Journal Code: 9714109 Publishing Model Print

Document type: Journal Article; Research Support, Non-U.S. Gov't

Languages: ENGLISH
Main Citation Owner: NLM

Record type: MEDLINE; Completed

Subfile: INDEX MEDICUS

As part of an ongoing research effort on aqueous two-phase systems (ATPSs) with volatile salts, this work describes the partitioning behavior of a series of amino acids, namely L-serine, glycine, L-alanine, L-valine, L-methionine, L-isoleucine, and L-phenylalanine, in these systems. The results show that amino acids partition in a similar way in polymer-volatile salt ATPSs and in traditional polymer-salt ATPSs. Increasing amino acid hydrophobicities lead to increasing partition coefficients. Moreover, the common linear relationship between the logarithm of the partition coefficient and the tie line length is observed here as well. Furthermore, the relation between relative partition coefficients and relative hydrophobicities of amino acids in the extraction systems investigated in this work is comparable to that in other extraction systems.

Descriptors: *Amino Acids--isolation and purification--IP; *Salts--chemistry--CH;

Volatilization; Water--chemistry--CH

CAS Registry No.: 0 (Amino Acids); 0 (Salts); 7732-18-5 (Water)

Record Date Created: 20001128 **Record Date Completed:** 20001128

Dialog eLink:

13/5/9 (Item 1 from file: 5)

DIALOG(R)File 5: Biosis Previews(R)

(c) 2010 The Thomson Corporation. All rights reserved.

16896997 **Biosis No.:** 200200490508

Manufacturing protein based structures using a volatile acid

Author: van der Wielen Luuk A M (Reprint); Hofland Gerard W (Reprint); Ottens

Marcel (Reprint); Gulobovic Mariana (Reprint); Witkamp Geert-Jan

Author Address: Kluyver Laboratory for Biotechnology, TU Delft, Julianalaan 67,

Delft, 2665 AM, Netherlands**Netherlands

Journal: Abstracts of Papers American Chemical Society 224 (1-2): p BIOT 281 2002

2002

Medium: print

Conference/Meeting: 224th National Meeting of the American Chemical Society

Boston, MA, USA August 18-22, 2002; 20020818

ISSN: 0065-7727

Document Type: Meeting; Meeting Abstract

Record Type: Citation Language: English

Registry Numbers: 124-38-9: carbon dioxide; 7647-14-5: salts; 7732-18-5: water

DESCRIPTORS:

Major Concepts: Biochemistry and Molecular Biophysics; Methods and Techniques **Chemicals & Biochemicals:** acids; carbon dioxide; precipitants; protein-based structures--applications, manufacture method, uses; proteins--analysis, aqueous solutions, precipitation, purification, recovery, synthesis; salts; solvents; volatile acids; water

Methods & Equipment: protein purification techniques--applications, methodologies, purification method

Miscellaneous Terms: Concept Codes: biocatalysis; biotechnology; pH; Meeting Abstract; Meeting Abstract

Concept Codes:

00520 General biology - Symposia, transactions and proceedings 10060 Biochemistry studies - General 10064 Biochemistry studies - Proteins, peptides and amino acids

Dialog eLink:

13/5/12 (Item 3 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci (c) 2010 The Thomson Corp. All rights reserved.

15031161 Genuine Article#: 030LX Number of References: 103

Title: A generalized approach to thermodynamic properties of biomolecules for use in bioseparation process design

Author: Ahamed T; Ottens M (REPRINT); Nfor BK; van Dedem GWK; van der Wielen LAM

Author Email Address: m.ottens@tudelft.nl

Corporate Source: Delft Univ Technol, Dept Biotechnol, Julianalaan 67/NL-2628 BC Delft//Netherlands/ (REPRINT); Delft Univ Technol, Dept Biotechnol, NL-2628 BC Delft//Netherlands/

Journal: FLUID PHASE EQUILIBRIA, 2006, V 241, N1-2 (MAR 15), P 268-282

ISSN: 0378-3812 **Publication Date:** 20060315

Publisher: ELSEVIER SCIENCE BV, PO BOX 211, 1000 AE AMSTERDAM,

NETHERLANDS

Language: English **Document Type:** REVIEW

Geographic Location: Netherlands

Journal Subject Category: THERMODYNAMICS; CHEMISTRY, PHYSICAL;

ENGINEERING, CHEMICAL

Abstract: Bioseparation techniques exploit the differences of physicochemical or thermodynamic properties between the product and the contaminants. Rapid development of a downstream process, therefore, requires physicochemical and thermodynamic

characterization of the components to be separated. In this paper, we investigate whether a generalized thermodynamic interrelation exists among different parameters. For instance activity coefficients, osmotic virial coefficients and the solubility of macro molecules are interrelated to each other. Experimental determination of any one of these parameters can be translated across the boundaries of different separation techniques. A number of downstream separation processes, including size-exclusion chromatography, hydrophobic-interaction chromatography, reversed-phase chromatography, aqueous twophase separation, crystallization and precipitation, are found to be explained and designed using this generalized thermodynamics. This generalization of thermodynamic properties together with high-throughput experimentation provides a systematic and high-speed approach to bioseparation process development and optimization. The applicability of this approach for bioseparation process design was investigated by a case study on nystatin, a medium-sized biomolecule. The distribution coefficients of nystatin in reversed-phase chromatography showed straightforward relationship with the solubilities at various solvent compositions and the experimental data supported the trend of the relationship. (c) 2005 Elsevier B.V. All rights reserved.

Descriptors: SCIAuthor Keywords: activity coefficients; osmotic virial coefficient; bioseparation; biomolecule; bioprocess design; nystatin

Identifiers: KeyWord Plus(R): AQUEOUS 2-PHASE SYSTEMS; HYDROPHOBIC-INTERACTION CHROMATOGRAPHY; 2ND VIRIAL-COEFFICIENT; SELF-INTERACTION CHROMATOGRAPHY; PERFORMANCE LIQUID-CHROMATOGRAPHY; GREEN FLUORESCENT PROTEIN; SURFACE HYDROPHOBICITY; MOLECULAR THERMODYNAMICS; PHASE-SEPARATION; PHYSICOCHEMICAL PROPERTIES

Cited References:

UK 0033934, 2000, JENSEN TB ABBOTT NL, 1990, V1, P3, BIOSEPARATION ADAMOVICS J, 1986, V9, P141, J LIQ CHROMATOGR AGENA SM, 1999, V64, P144, BIOTECHNOL BIOENG AGENA SM, 1997, V55, P65, BIOTECHNOL BIOENG AHAMED T, 2005, V1089, P111, J CHROMATOGR A ALBERTSSON PA, 1986, PARTITION CELL PARTI ANDREWS AT, 1994, V44, P29, BIOTECHNOL BIOENG ANDREWS BA, 2005, V90, P380, BIOTECHNOL BIOENG ASENJO JA, 1994, V668, P47, J CHROMATOGR A ASENJO JA, 1991, V646, P334, ANN NY ACAD SCI ASENJO JA, 1990, V2, P519, SEPARATION BIOTECHNO ASENJO JA, 1990, P3, SEPARATION PROCESSES ASENJO JA, 1990, P1, PROTEIN PURIFICATION ASENJO JA, 2004, V17, P236, J MOL RECOGNIT BASTEK P, 2004, 227 ACS NAT M BIOT 1 BEHLKE J, 1999, V76, P13, BIOPHYS CHEM BLOUSTINE J, 2004, V85, P2619, BIOPHYS J BOSMA JC, 2000, V743, P169, J CHROMATOGR B CABEZAS H, 1993, V32, P2892, IND ENG CHEM RES CABEZAS H, 1996, V680, P3, J CHROMATOGR B

CHEONG WJ. 1990. V499, P373, J CHROMATOGR COEN CJ, 1995, V41, P996, AICHE J COFFMAN JL, 2005, 229 ACS NAT M BIOT 1 CURTIS RA, 1998, V57, P11, BIOTECHNOL BIOENG EDMOND E, 1968, V109, P569, BIOCHEM J EDMOND E, 1970, V117, P85, BIOCHEM J EITEMAN MA, 1991, V2, P31, BIOSEPARATION FAN WY, 1998, V59, P461, BIOTECHNOL BIOENG FAUSNAUGH JL, 1984, V317, P141, J CHROMATOGR FORCINITI D. 1991, V38, P986, BIOTECHNOL BIOENG GARCIA CD, 2003, V19, P1006, BIOTECHNOL PROGR GEORGE A, 1994, V50, P361, ACTA CRYSTALLOGR D 4 GEORGE A, 1997, V276, P100, METHOD ENZYMOL GUO B, 1999, V196, P424, J CRYST GROWTH HAAS C, 1999, V103, P2808, J PHYS CHEM B HAYNES CA, 1992, V96, P905, J PHYS CHEM-US HAYNES CA, 1989, V53, P463, FLUID PHASE EQUILIBR HAYNES CA, 1989, V93, P5612, J PHYS CHEM-US HILL TL, 1959, V30, P93, J CHEM PHYS HO JGS, 2003, V12, P708, PROTEIN SCI HUANG T, 2005, 229 ACS NAT M BIOT 6 JAIN S, 2004, V1035, P83, J CHROMATOGR A JENNISSEN HP. 2000, V5, P131, INT J BIOCHROMATOGR JENSEN TB, 2000, V873, P149, J CHROMATOGR A JIANG JW, 2000, V104, P7197, J PHYS CHEM B KING RS, 1988, V34, P1585, AICHE J KORNMANN H, 2005, 229 ACS NAT M BIOT 3 KRAGTEN J, 1994, V119, P2161, ANALYST KULA MR, 1979, V2, P71, APPLIED BIOCH BIOENG LASER EW, 1994, V721, P337, ANN NY ACAD SCI LASER EW, 1992, V584, P35, J CHROMATOGR LESER EW. 1996. V782. P441. ANN NY ACAD SCI LIENOUEO ME, 1996, V20, P189, COMPUT CHEM ENG LIENOUEO ME, 1999, V74, P293, J CHEM TECHNOL BIOT LIENQUEO ME, 2003, V1009, P189, J CHROMATOGR A LIENOUEO ME, 2000, V24, P2339, COMPUT CHEM ENG LIENQUEO ME, 2002, V978, P71, J CHROMATOGR A LUO L, 2005, P68, INT C BIOP PUR DELFT LUTHER JR, 1994, V44, P147, BIOTECHNOL BIOENG MAHN A, 2004, V1043, P47, J CHROMATOGR A MAHN A, 2005, V1066, P81, J CHROMATOGR A MALFOIS M, 1996, V105, P3290, J CHEM PHYS MARGOSIS M. 1984, V73, P835, J PHARM SCI MCMILLAN WG. 1945, V13, P276, J CHEM PHYS MEIER PC, 2000, STAT METHODS ANAL CH MELANDER W. 1977, V183, P200, ARCH BIOCHEM BIOPHYS

MELANDER WR, 1984, V317, P67, J CHROMATOGR MELANDER WR, 1989, V469, P3, J CHROMATOGR MICHEL GW, 1977, NYSTATIN ANAL PROFIL MILHAUD J, 1986, V358, P284, J CHROMATOGR-BIOMED NAKAZATO K, 2004, V11, P34, J SYNCHROTRON RADI 1 NEAL BL, 1999, V196, P377, J CRYST GROWTH NICHOL LW, 1978, V9, P47, BIOPHYS CHEM NICOUD RM, 1996, V2, P165, ISOLATION PURIFICATI OGSTON AG, 1958, V54, P1754, T FARADAY SOC OLIVERANAPPA A, 2004, V807, P81, J CHROMATOGR B PENNA TCV, 2003, V105, P481, APPL BIOCHEM BIOTECH PJURA PE, 2000, V300, P235, J MOL BIOL PRAUSNITZ JM, 2003, V75, P859, PURE APPL CHEM PROKOPAKIS GJ, 1990, P571, SEPARATION PROCESSES PRZYBYCIEN TM, 2004, V15, P469, CURR OPIN BIOTECH REGE K, 2004, 227 ACS NAT M BIOT 3 ROSENBAUM DF, 1990, V76, P150, PHYS REV LETT ROY I, 2004, V1698, P107, BBA-PROTEINS PROTEOM RUPPERT S, 2001, V17, P182, BIOTECHNOL PROGR SALGADO JC, 2005, V1075, P133, J CHROMATOGR A SARMENTO MJ, 1994, V668, P117, J CHROMATOGR A SAUER B. 1994, V672, P247, J CHROMATOGR A SCHAINK HM. 2000, V2, P1537, PHYS CHEM CHEM PHYS SCHOENMAKERS PJ, 1979, V185, P179, J CHROMATOGR SHARMA A, 2002, V48, P391, CARBOHYD POLYM SHEARWIN KE, 1990, V190, P523, EUR J BIOCHEM STABY A, 1996, V734, P205, J CHROMATOGR A TESKE CA. 2004, V108, P7437, J PHYS CHEM B TESSIER PM, 2002, V82, P1620, BIOPHYS J TUBIO G, 2004, V799, P293, J CHROMATOGR B VAILAYA A. 1996, V35, P2964, IND ENG CHEM RES VANDERWIELEN LAM, 1999, V74, P275, J CHEM TECHNOL BIOT WALTER H, 1991, V215, P1, ANAL BIOCHEM WATANABE E. 1994, V721, P348, ANN NY ACAD SCI WILLS PR, 1993, V300, P206, ARCH BIOCHEM BIOPHYS ZIMM BH, 1946, V14, P164, J CHEM PHYS

Please enter a command or be logged off in 5 minutes

? logoff

```
09jun10 14:04:05 User276629 Session D310.2

$9.30 2.513 DialUnits File155

$5.32 19 Type(s) in Format 5

$0.00 8 Type(s) in Format 6 (UDF)
```

```
$5.32 27 Types
$14.62 Estimated cost File155
        $17.01
                2.617 DialUnits File5
           $36.96 14 Type(s) in Format 5
           $0.00 1 Type(s) in Format 6 (UDF)
        $36.96 15 Types
        Estimated cost File5
               0.418 DialUnits File24
        $2.83
        Estimated cost File24
 $2.83
        $0.64
                0.094 DialUnits File28
 $0.64 Estimated cost File28
       $60.15
                2.012 DialUnits File34
         $210.72 24 Type(s) in Format 5
           $0.00 11 Type(s) in Format 6 (UDF)
      $210.72 35 Types
$270.87 Estimated cost File34
        $1.11
                0.251 DialUnits File35
        Estimated cost File35
 $1.11
        $0.92
                0.117 DialUnits File40
        Estimated cost File40
        $0.75
                0.110 DialUnits File41
 $0.75
        Estimated cost File41
                0.193 DialUnits File44
        $1.64
        Estimated cost File44
 $1.64
        $1.20
                0.221 DialUnits File45
 $1.20 Estimated cost File45
        $3.46
                 0.692 DialUnits File50
 $3.46
        Estimated cost File50
        $2.76
                0.616 DialUnits File65
 $2.76
        Estimated cost File65
        $5.97
                0.508 DialUnits File71
           $2.80 1 Type(s) in Format 5
        $2.80 1 Types
 $8.77 Estimated cost File71
       $16.89 1.129 DialUnits File72
          $57.96 14 Type(s) in Format 5
           $0.00 1 Type(s) in Format 6 (UDF)
       $57.96 15 Types
$74.85 Estimated cost File72
       $29.00
               1.938 DialUnits File73
          $74.52 18 Type(s) in Format 5
       $74.52 18 Types
$103.52 Estimated cost File73
                 0.372 DialUnits File76
        $2.52
 $2.52
        Estimated cost File76
        $0.47
                0.101 DialUnits File91
 $0.47
        Estimated cost File91
                 0.191 DialUnits File98
        $0.89
        Estimated cost File98
 $0.89
                0.062 DialUnits File110
        $0.39
 $0.39
        Estimated cost File110
        $1.03
                0.172 DialUnits File135
 $1.03
        Estimated cost File135
        $0.47
                0.069 DialUnits File136
 $0.47
        Estimated cost File136
        $0.50
                 0.152 DialUnits File143
 $0.50 Estimated cost File143
```

```
$9.04
               1.683 DialUnits File144
           $2.07 1 Type(s) in Format 3
          $12.42 6 Type(s) in Format 5
$0.00 2 Type(s) in Format 6 (UDF)
       $14.49 9 Types
$23.53 Estimated cost File144
        $3.91
               1.058 DialUnits File154
           $3.36 12 Type(s) in Format 5
        $3.36 12 Types
 $7.27
       Estimated cost File154
       $0.26
               0.069 DialUnits File164
 $0.26
       Estimated cost File164
               0.097 DialUnits File172
           $9.68 2 Type(s) in Format 5
       $9.68 2 Types
       Estimated cost File172
$11.12
       $2.97
              0.441 DialUnits File185
 $2.97 Estimated cost File185
       $10.40 0.366 DialUnits File357
           $3.15 1 Type(s) in Format 3
           $9.70 2 Type(s) in Format 5
       $12.85 3 Types
$23.25 Estimated cost File357
       $0.25
               0.064 DialUnits File369
       Estimated cost File369
 $0.25
       $0.18
               0.046 DialUnits File370
 $0.18 Estimated cost File370
                0.428 DialUnits File391
       $0.00
 $0.00 Estimated cost File391
              0.865 DialUnits File434
          $26.34 3 Type(s) in Format 5
       $26.34 3 Types
$52.19 Estimated cost File434
       $0.32
               0.057 DialUnits File457
 $0.32
       Estimated cost File457
               0.039 DialUnits File467
       $0.27
       Estimated cost File467
 $0.27
                0.048 DialUnits File138
        $0.20
 $0.20
       Estimated cost File138
       $1.00
               0.209 DialUnits File149
 $1.00 Estimated cost File149
        $3.28
                0.508 DialUnits File156
           $1.17 1 Type(s) in Format 5
        $1.17 1 Types
       Estimated cost File156
 $4.45
        $1.34
                0.393 DialUnits File159
           $0.60 2 Type(s) in Format 5
       $0.60 2 Types
       Estimated cost File159
 $1.94
               0.207 DialUnits File162
        $1.02
 $1.02
       Estimated cost File162
               0.083 DialUnits File266
       $0.32
 $0.32 Estimated cost File266
       $36.31
                2.646 DialUnits File399
$36.31 Estimated cost File399
       $0.29
                0.055 DialUnits File444
 $0.29 Estimated cost File444
```

OneSearch, 42 files, 23.912 DialUnits FileOS

\$12.82 INTERNET \$728.14 Estimated cost this search \$728.22 Estimated total session cost 24.157 DialUnits

Ended session: 2010/06/09 16:04:07